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AUTHOR	Curtis, John A.
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ABSTRACT

This extensive report describes and provides documentation on Special Communications Services for the Sensory Impaired (SCS), a Virginia-based telecommunications delivery system developed by the Center for Excellence, Inc. (CenTex), to provide information and entertainment broadcasting services to the visually handicapped, the hearing impaired, the deaf/blind, the aged, and the homebound. A six-section descriptive report provides: (1) a project summary; (2) information on marketing analysis, strategies, and results; (3) systems concept strategies, engineering delivery-system capabilities, and service distribution scope; (4) the CenTex Continuing Evaluation and Service Improvement Programs; (5) funding sources and operating procedures likely to assure the delivery of needed SCS services; and (6) regulatory, legal, political, and other barriers to SCS operational efficiency and economic viability. Following the report, twelve pieces of supporting documentation are provided: how to establish and operate a radio reading service, recommendations for the recruitment of SCS volunteers, current SCS user program guide, SCS evening program guide, SCS engineering report, CenTex's SCS evaluation report, CenTex's SCS survey recommendations and responses, SCS press recognition, SCS volunteer newsletter, chamber of commerce listings of SCS fellow public service entities, instructional management procedures for handicapped students, and an Association of Radio Reading Services directory. (LMM)

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PROJECT SCS

(Special Communication Services)

U.S. HEW/DOE Grants 033A-7801-P4041

CENTER FOR EXCELLENCE, INC.
November 20, 1982

IR 010 895

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A report describing

1. America's FIRST telecommunications delivery system designed to provide information and entertainment broadcasting services to all five of America's major sensory-deprived populations (the visually handicapped, the hearing impaired, the deaf/blind, the aged, and the homebound);

2. America's FIRST 24-hour-per-day, seven-days-per-week operation to supply such services;

3. the four formats required to make useful such services;

4. created by the Center for Excellence, Inc. on the bases of:

   (a) funding supplied by the Federal Department of Health and Human Resources (Grant Nos. 033A-7801-P4041; 033A-7901-P4041; 033A-8001-P4041) to the Center for Excellence, Inc.; and

   (b) the use of the 50,000 watt WBCI FM station's sub-carrier;

   (c) the without-cost use of Hampton Roads Cablevision, Warner/Amex, Cox and Continental CATV channels in the Tidewater area of Virginia;

   (d) funding and direction by the Federal Bureau of Education for the Handicapped;

   (e) the all-out support and funding by Virginia's Department of Education; and

   (f) early funding and all-out support by Virginia's Department for the Visually Handicapped;

   (g) very recently some support by Virginia's Department of Telecommunications

- -

Project Director: John A. Curtis

Associate Project Director: Alan R. Blatecky

- -

Submitted By:

The Center for Excellence, Inc.
Post Office Box 158
Williamsburg, Virginia 23185
(804) 229-8541

November 20, 1982

[1]CENTEX^{C}'S PROJECT SCS

(Special Communications Services for the Sensory-Impaired)

SECTION I: PROJECT SUMMARY

A. Project Objectives

Project SCS has had, from its inception, these objectives:

(1) to determine the numbers, locations and mores of the respective populations in a near-perfect microcosm of American socio-economic life;

(2) to use this geographic and demographic microcosm to identify as precisely as possible the broadcasting informational and entertainment needs of each of the five major sensory-deprived populations and prioritize these needs from the viewpoints of the specific populations;

(3) to develop broadcast information and entertainment programming to meet the needs of this nation's five sensory-deprived populations;

(4) to determine whether the facilities, programming, and/or other organizational requirements required to supply services to each of the five populations might be similar enough to make it economically practical to utilize a single organization and distribution system to serve the unique and varying needs of the five targeted populations;

(5) to make use of modern telecommunications methodologies to deliver these broadcasting programming services in the varying formats required by these individual population groups. ([a] the visually impaired requiring auditory copy; [b] the hearing impaired requiring visual copy; [c] the deaf-blind requiring Braille-machine copy; [d] the aged, usually requiring auditory, visual or Braille-machine copy; and, [e] the home-bound, who may require auditory, visual, Braille-machine, or two-way audio-visual information-transfer formats)

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[1] The copyrighted acronym for the CenTer for Excellence, Inc., an IRS-approved non-profit Virginia-Chartered, educational/medical/social services telecommunications Applications Research Laboratory and Test-Bed Network, headquartered in Williamsburg, Virginia, P. O. Box 158, Williamsburg, Virginia, 23185, Telephone (804) 229-8541.

(6) to make maximum use of existing facilities and services so that the costs in time and dollars required for the initial systems development and the continuing operations of the services could be substantially reached;

(7) to determine the most cost-effective telecommunications delivery-system most likely to meet the particular needs of each of the five sensory-impaired populations pertinent to the project;

(8) to establish a continuing evaluation program (and procedures) to determine changing user-needs to assess program quality, and to identify user-suggested improvements;

(9) to identify the funding sources likely (a) to initiate the risk-type actions stated by 1-10 preceding, and, (b) to make possible the continued delivery of the services which the use of risk-capital demonstrated were practical and significant public services;

(10) to identify (and develop methodologies to eliminate): (a) regulatory; (b) legal; (c) political; and, (d) other barriers - which make difficult the implementation of SCS objectives and/or the replication thereof by others;

(11) to keep accurate records so that a comprehensive, succinct, useful report, based on actual project-developed results, could be written for use by others wishing to establish new, similar services and/or for already operational service operations wishing to make use of SCS experience.

B. Project Effectiveness

(Project objectives vs. the attainment of those objectives)

Project objectives (1), (2) and (3) have been fully met. The facts supporting this statement are clearly set forth in Section Two - Market Analyses, Strategies and Action Results.

Project objectives (4), (5), (6) and (7) have also been fully met and the facts on which this statement are set forth in Section Three: SYSTEMS CONCEPT STRATEGIES, ENGINEERING, DELIVERY-SYSTEM CAPABILITIES AND SERVICE DISTRIBUTION SCOPE.

The implementation of project objective (8) has caused CenTeX^c to develop what is believed to be one of the most, (if not the most), comprehensive, productive and accurate SCS-service-user evaluation system today in operation, according to George Kroger, Deputy Director of the Virginia Department for the Visually Handicapped. See Section Four: EVALUATION - MAKING CERTAIN THAT CONSUMER NEEDS ARE FULLY MET.

Section Five: FUNDING SOURCES AND OPERATING PROCUEDURES LIKELY TO ASSURE THE DELIVERY OF NEEDED SCS SERVICES describes what CenTeX^c has, to date, done to keep its services in full operation and ever expanding its geographic service coverage. It should be further emphasized that this SCS-type operation necessitates continuing, innovative fund-raising action.

The important points of this report, however, are these:

(A) CenTeX^c SCS operation has continued in full operation (and has even expanded its services) since Federal project funding stopped during the first quarter of 1981; and,

(b) the CenTeX^c SCS operation is ...

1. the only U.S.A. SCS service today delivering needed broadcasting information and entertainment services to all five sensory-deprived populations; and,

2. America's only 24-hour, seven-days-per-week such service operating to meet the special broadcasting needs of this nation's sensory deprived.

Section Six: REGULATORY, LEGAL, POLITICAL AND OTHER BARRIERS TO SCS OPERATIONAL EFFICIENCY AND ECONOMICAL VIABILITY clearly states that the ill-advised decisions of a Virginia state agency almost wiped out the CenTeX^c SCS operation --- the first SCS-type service in the Commonwealth of Virginia.

Section Six also points out that some of the regulatory thinking currently under consideration by the Federal Communications Commission may require substantial and costly technical changes in the telecommunications delivery systems currently being used by some 70-odd SCS-type service operations throughout the nation.

Hopefully, this report will in itself fully meet the intent of Project SCS's eleventh objective --- the submission of an experienced-based, comprehensive project report containing facts and operational information of value to both existing and potential suppliers of the broadcasting information and entertainment services needed by America's sensory-deprived populations.

C. THE CONSORTIUM PRINCIPALS WHO CREATED AMERICA'S FIRST TWENTY-FOUR-HOURS-PER-DAY, SEVEN-DAYS-PER-WEEK, MULTI-FORMATED BROADCAST SERVICES FOR THIS NATIONS'S SENSORY-DEPRIVED POPULATIONS

The implementation of projects having the broad service and technical scope of CenTeX's SCS concept, requires much work, many dollars and the active, cooperative participation of complementary skills. Fortunately, for Project SCS, these requirements were made available by the following persons:

1. At The Federal Level

(a) Dr. Albert Horley

In 1975, the Director of Project SCS submitted a comprehensive report regarding educational/medical/social services telecommunications delivery systems to Dr. Albert Horley, Director of the Office of Telecommunications Policy of the then Department of Health, Education and Welfare. The needs for (and telecommunications delivery methodologies suggested to meet these needs) included a plan to serve the nation's sensory-deprived populations. Dr. Horley emphasized the usefulness of this report by referring to it as "a Bible" and insisting that his newly acquired Assistant, Howard Hupe, study its content.

(b) Howard Hupe/Justine Rodriguez/Anne Erdman and the Department of Health, Education and Welfare

After Dr. Horley -- on leave from Stanford University -- returned to California, HEW's office of Telecommunication Policy was reorganized under the direction of the very capable Justine Rodriguez. The administration of a one-million-dollar-per-year fund authorized by the U. S. Congress to finance the demonstration of innovative uses of telecommunications to meet unfilled public-service needs was one of the assignments of this reorganized group. Since Mr. Hupe had read the content of the Horley-designated telecommunications "Bible", CenTeX was invited, as were many others, to submit a proposal for a grant under the demonstration funding.

This submission led to a grant award to CenTeX to demonstrate its SCS services usefulness. Based on its first and second year performance, CenTeX was given three successive grants to complete implementation of its Special Communications Services (SCS).

The grant numbers and dollar values of these awards follow:

Year	Grant Number	Dollar Value
1978 (Feb)	033A-7801-P4041	$ 60,456
1979	033A-7901-P4041	79,948
1980	033A-8001-P4041	103,030
		$243,434

These grant dollars enabled CenTeX to:

(1) set up and equip its SCS studio;

(2) contract for the use of the subcarrier of a 50,000-watt, commercial FM station;

(3) demonstrate CenTeX's recommended innovative technological concepts;

(4) identify the factors on which the economical viability of SCS-type services depend; and,

(5) develop and publish the experienced-based technical, operational and programming concepts subsequently described by this report.

(c) Dr. Herman Saettler and the Bureau of Education for the Handicapped

In June 1976, the Bureau of Education for the Handicapped, and its Dr. Herman Saettler, awarded CenTeX^{c} its first major non-private funding for Project SETT-UP. The first-year success led this project to subsequent BEH awards totaling $1,030,000 and the creation of America's first low-powered, two-way, multi-purpose, multi-media, privacy-protectable, low-cost educational/medical/social services telecommunications delivery system.

Project SCS has made use of this network to:

(1) piggy-back the extension of its services to a geographic area of approximately 5,600 square miles; and,

(2) obtain, without cost to SCS, the technical skills and organizational support essential to the implementation of CenTeX's SCS concept.

2. At The State Level

(a) William T. Coppage

Mr. Coppage, Director of Virginia's Department for the Visually Impaired and a CenTeX^{c} Director, persuaded CenTeX to move ahead of schedule to establish its SCS-type concept in Virginia. He, further, introduced CenTeX's SCS Project Director to Mrs. Rosanna Hurwitz, Director of the University of Kansas Radio Reading Service (the nation's second such service in point of history), who later wrote SCS's first lesson regarding "how to start and run an SCS-type system".

(b) Dr. Earl Dodson

Dr. Dodson, as Chairman of the Board of the Virginia Department for the Visually Handicapped, along with Mr. Coppage, persuaded his Board to contribute $12,000 to the operation of SCS during the critical period when Federal dollars were no longer available to CenTeX for SCS operating costs.

(c) George A Goger

George Goger, Mr. Coppage's Administrative Assistant, has, and continues to expedite cooperation between the Virginia Department for the Visually Handicapped employees and those of CenTeX. He, further, very effectively continues to critique CenTeX's programming strategies and consumer-needs study procedures.

(d) Fred P. Yates and Tilly Page W. Corbett

(respectively, as Director and Deputy Director of the Virginia Council for the Deaf) brought to CenTeX's SCS volunteers and staff an understanding of the vocabulary and tempo limitations of the deaf, and taught SCS staff members why these factors should be recognized in the production of programming for the deaf population.

(e) Delegate George W. Grayson

Williamsburg's Delegate to Virginia's General Assembly introduced a resolution recognizing CenTeX's SCS operations.

He enlisted the support of the then-Lt. Governor, Charles Robb, who was, at that time, President of the Virginia Senate. A copy of the resolution which was passed by both houses appears on the following page. The content and passage of this unusual, very comprehensive and highly favorable citation did much to produce creditability for CenTeX's SCS operation and to encourage others to duplicate some of CenTeX's SCS services in other parts of the Commonwealth.

3. At The Local Level

(a) Dr. George R. Healy and Ross Weeks, Jr.

Thanks to a founding CenTeX supporter, William and Mary's Vice President, Academic Affairs (Dr. George R. Healy) Ross Weeks, Jr., then the College's Information Officer, made available facilities required for the CenTeX first-year operation on a temporary-occupancy basis.

(b) Henry A. Renz

At the request of Henry A. Renz, then Superintendent of the Williamsburg/James City County School System, the Williamsburg/ JCC School Board made available, in 1979, a more permanent "home" for CenTeX's SCS operation.

A trailer with adequate space, utilities, parking space, and custodial services (representing an annual SCS operational cost-saving of not less than $7,500) was made available for SCS use on school property (behind the Berkeley School in James City County where CenTeX's other operating headquarters were already located).

Thus, CenTeX has been able to make use, on timely bases, of CenTeX non-SCS engineering, programming and managerial skills, as well as the CenTeX Tidewater Telecommunications Network Distribution System --- on either a no-cost or nominal-cost basis.

4. At The Commercial Level

The CenTeX SCS operational structure and network could never have been developed to its current regionally significant public-service

COMMONWEALTH OF VIRGINIA

GENERAL ASSEMBLY

HOUSE JOINT RESOLUTION NO. 37

Congratulating the Center for Excellence, Inc.

WHEREAS, the Commonwealth of Virginia has long been committed to providing life-enhancing as well as life-sustaining services to the handicapped, the elderly, and the homebound and to furthering continuing professional education programs; and

WHEREAS, economic realities increase our recognition that these services can only be provided through the cooperative efforts of government agencies and concerned and compassionate private citizens; and

WHEREAS, the Center for Excellence, Inc., a private, nonprofit educational research organization, has for seven years been dedicated to disseminating vitally needed educational, medical, and social service information to the deaf, the blind, and the homebound, and to developing and distributing programs to improve the skills of educators and other professionals; and

WHEREAS, the Center for Excellence, Inc. established the first station in Virginia to provide two-way telecommunications to these populations; and

WHEREAS, John A. Curtis, the founder and current president, and the other members of the Board of Directors of the Center for Excellence, Inc. have selflessly contributed of their energies and expertise by taking time from their demanding professional lives to serve the Center for Excellence, Inc. without receiving any remuneration; and

WHEREAS, the Center for Excellence, Inc. has developed a two-way educational telecommunications network, which, when completed, will encompass an area between Norfolk and Richmond, thereby serving one-third of the people of the Commonwealth; and

WHEREAS, the Center for Excellence, Inc. has perfected many sophisticated telecommunications methods, including systems to allow broadcasts to be relayed to select audiences, ensuring the privacy of the viewer and the suitability of the transmission; and

WHEREAS, the Center for Excellence, Inc. has received the support and endorsement of the Virginia Commission for the Visually Handicapped, the Virginia Council for the Deaf, the Virginia Department of Health, the Virginia Department of Education, the Virginia Department of Rehabilitative Services, and the Virginia Department of Mental Health and Mental Retardation; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Center for Excellence, Inc. be congratulated on its many contributions in expanding the scope of information delivery services to isolated populations in Virginia; and, be it

RESOLVED FURTHER, That the Clerk of the House of Delegates prepare a copy of this resolution for presentation to the Center for Excellence, Inc. in token of the esteem in which it is held by the General Assembly and by fellow Virginians.

Agreed to by the House of Delegates,
February 27, 1980
J H Holleman Jr
Clerk.

Agreed to by the Senate,
February 25, 1980
J T Shropshire
Clerk.

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stature without the extensive and generous support by some of Tidewater Virginia's commercial telecommunications system operators. The individuals and commercial companies contributing very significantly to SCS's services for the sensory-deprived are:

(a) Donald M. Bentley
(Partner in Colonial Broadcasters, Inc., and operator of the 50,000-watt FM station WBCI, which is the key to the distribution of SCS services in the rural areas of the CenTeX's service coverage.

(b) Ronald W. Roe and Brinton Belyea
(who, as sequential General Managers, have made available Hampton Roads Cablevision CATV FM channels for the distribution of CenTeX's SCS services in Newport News, Virginia)

(c) William T. Day, Peter Gannon and Ron Horchler
(who have made available Warner/Amex CATV channels for the distribution of CenTeX's SCS services in Hampton, Poquoson and Williamsburg, Virginia)

(d) Roger M. Pierce, Robert W. Hale and Cecil McCoy
(who have made available the Cox Cable of Virginia CATV FM channels for the delivery of CenTeX's SCS services in Norfolk, Portsmouth and Virginia Beach, Virginia)

(e) H. W. Goodall and Richard Thurnamin
(who have made available the Continental Cablevision FM channels to distribute CenTeX's SCS services in James City County, York County, Richmond and Henrico County, Virginia)

5. Rosanna Horowitz
whose lectures and written materials regarding the operation of the University of Kansas Radio Reading Service provided the fundamental "guide posts" to CenTeX's volunteer corps development and initial programming developments) (See Documentation One)

6. William S. Halstead
(former corporate partner of CenTeX's Founder and the originator of the use of FM station subcarriers for the distribution of Muzak services; and the one most responsible for the Federal Communication Commission's regulatory acceptance of this system innovation. Mr. Halstead assisted CenTeX in the development of the CenTeX multiplexing of FM station subcarriers.)

7. James T. Micklem
(who, as Director of Special Education, Virginia's Department of Education, has and continues to be the most effective CenTeX supporter and whose interest, along with that of BEH's Herman Saettler and CenTeX Founder, John Curtis, has been one of the three "keys" to the operational success and public-service productivity of all of CenTeX's operations.

8. The Key CenTeX Staff Members

(a) John A. Curtis
(who has been SCS's project director since the project began; who developed the original CenTeX concept of a single organization to serve all five of the major sensory-deprived populations; who also developed the telecommunications delivery required to implement this concept; and who secured the private and public dollars; the non-commercial and commercial facilities contributions; and put together the organization which has made CenTeX's SCS operation a continuing, viable, public-service-productive operation.)

(b) David W. Page (Recommended by Dr. Louis P. Messier)
(who was SCS's initial general manager [replaced by Alan R. Blatecky] but who originated SCS's Volunteer Recruitment Plans and Procedures and who identified the Williamsburg-area advocacy entities which could become valuable to CenTeX in the social-service field) (See Documentation Two.)

(c) Alan R. Blatecky
(who engineered the SCS studio; contributed so substantially to Project SCS's Management that he was appointed Associate Project Director during the third project year.

(d) Clifford R. Pence, Jr.
(who was business manager of the SCS operation during its first three operating years and was followed by Ross Strodel, now CenTeX's Director of Administrative Services.

(e) J. Scott Wheeler and William G. Wagner
(who conducted the 1979 indepth SCS user-services evaluation program, and recorded the interviews with the scheduled interviewees so that precise user text could be recorded for future study and funding uses.)

(f) LaVerne Ricks-Brown
(who conducted the 1981 SCS user-evaluation study which is a part of this report.)

(g) Henry L. Morrow
(who, in addition to handling all SCS installation and maintenance engineering, also contributed unique programming concepts involving materials as well as control circuits.)

(h) Dr. Denise M. DeWald
(who developed the plans on which SCS's current programming expansion is based.)

(i) Nancy Ross
(who has aggressively and effectively expanded SCS's user programming and distribution service areas, and who is now operations manager of the CenTeX SCS operation.

(j) Gene Blatecky
(who implemented the initial CenTeX SCS programming policies and volunteer training program, and who managed SCS studio operations from late 1978 through November 1981.)

(k) Nancy Goulding
(who is CenTeX's sign-language instructor.)

(l) CenTeX's Special Communication Services Advisory Board
(whose current membership is as follows:)

Chairperson: Nancy Ross, SCS Manager
ExOfficio Members: John Curtis and Albert Harris
Members: Karen Bellefleur
Barbara "Tiger" Griffin
Kenneth M. "Mac" Lemley
Sally Lemley
Polly Longsworth
David Lydick
David J. Tetrault

(m) The Fourty-Four CenTeX SCS Volunteers
(who make possible the CenTeX SCS broadcasts, and who are listed on page 12 following.)

(n) The CenTeX Board of Directors
(who, as a group, included representatives of every major private and public type of special service, medical, and educational entities, and who, therefore, were able to provide Project SCS the quality interdisciplinary expertise and experienced policy leadership essential to the timely development of new public services. For membership, see the page following.)

"More than ever, there is an urgency to develop vehicles that will deliver information techniques and strategies to meet new needs and, at the same time, provide for revitalization and updating of basic teaching/learning activities. The CenTeX...effort has certainly been very beneficial to that geographical area."
Carl L. Riehm
Assistant Superintendent
for Curriculum and Instruction
Virginia Department of Education

"The convenience of CenTeX, the quality of instructors, the privacy-protection factor, and the picture reception of cable television cause us to look with favor upon CenTeX, its planning, and its program. We expect the participants of the first year will generate enthusiastic interest among numerous other teachers, resulting in an even larger number of participants in 1980-81."
Oliver C. Greenwood
Superintendent
Newport News Public Schools

CenTeX®
ENTER FOR EXCELLENCE, INC

"Small in size, our school division does not have the financial or human resources to provide a comprehensive inservice program in the many areas of need. CenTeX is an asset to our school division. Locally, we have a voice in identifying our staff development needs and in working closely with CenTeX officials in providing for those needs. "Programs offered via two-way telecommunication certainly provides convenience to teachers, reduces gasoline consumption, and exposes teachers with concerns and ideas in our system to teachers with similar/different concerns and ideas of several other systems."
Raymond E. Vernall
Superintendent
Poquoson City Public Schools

eedback from teachers nrolled has been ighly favorable with bout 90% indicating ood to excellent results nd acceptance."
oseph H. Lyles
ssistant Superintendent
nd Pupil Personnel
Services
ampton City Schools

"The CenTeX system...is one of the most exciting and useful endeavors being applied to the field of education today. By expanding the delivery system to West Point, our school division has the capability to: 1) receive the inservice training programs made available by CenTeX, and 2) produce programs designed to meet locally determined needs (which can be transmitted to cooperating school divisions). The telecommunication system will enable teachers, administrators and other instructional and supportive staff from several school divisions to participate in extensive inservice training programs offered on a live, interactive basis in locations and at times convenient to their participation."
George H. Stainback
Superintendent
King William —
West Point Public Schools

"With decreasing enrollments and need to reduce expenditures and possibly the number of open school buildings, it is most important that the costs of education be kept commensurate with the public's need for its services. One way to maintain the distribution, scope, and quality of public education is to make maximum use of two-way telecommunications delivery systems, such as those which CenTeX has in operation in Virginia's peninsula area."
Henry W. Tulloch
Member and former president
Virginia Board of Education

(o) Karen Pancirov
(manager of CenTeX's SCS resource development, public relations and promotional programs.)

SCS VOLUNTEERS

Bedell, Edna
Bellefleur, Karen
Blair, Janet
Bostic, Courtland
Chickos, Dorothy
Chernock, Ethel
Ch[illegible] Rushmore
Childs, Clara
Cox, Betty
Curtis, Bettina
Davis, Anne
Davis, Effie
Donaldson, Georgia
Dyal, Suzanne
Engs, Myrtle
Ferguson, John
Granger, Connie
Grant, Howard
Griffin, Barbara
Helms, Sherwin
Hicks, Bill
Holloway, Marilyn
House, Sean

House, Sean
Jones, Tom
Lemley, Kenneth
Lemley, Sarah
Lockhart, William
Longsworth, Polly
Lydick, David
Morrow, Kay
Morrow, Terry
Page, Clarence
Pouling, Joan
Pulliam, Deborah
Robbins, Mollie
Roebuck, Susan
Smith, Helen
Spalding, Polly
Spangler, Elsie
Steinbauer, Florence
Stokes, Louise
Tetrault, David
Trickett, Joan
Young, Lloyd

SECTION II: MARKET ANALYSIS, STRATEGIES AND RESULTS

A. Management Understanding of Pertinent Marketing Factors

1. The Already Available Marketing Information

Obviously, CenTeX^{C}'s first marketing step was to identify and study the available information pertinent to Project SCS. The search for this information led to the two oldest --- and considered the two best --- radio reading services in the nation, the Minnesota State reading service which went on air January 2, 1969, and the University of Kansas reading services (which went on air October 11, 1971.

Both of these "founding" services have limited their programming service to the visually handicapped. Though their experience, therefore, applied only to one of the five sensory-deprived populations which CenTeX was seeking to serve, their 8-10 years of pioneering experience had developed invaluable operations and programming data pertinent to such questions as "How To Start Your Own RRS?", "How To Administer RRS Services", "What Are The Facilities and Staff Requirements of an RRS Service?", "What Are The Technical Considerations and Costs of an RRS Service?", "Who Are The Listeners To RRS Services?", "Why Are The Recruitment and Training of Volunteers Basic Keys To A Successful RRS Service?", "Why Is Listener Feedback So Important To A RRS Service?".

The information supplied by the project directors and direct personal contact with these directors enabled CenTeX executives to get an indepth understanding of the operating requirements of the projected SCS appropriation. The supplied data were so basic and comprehensive, in fact, that they were subsequently published by the American Society for Engineering Education(3).

Copies of the published papers (See Appendix: Documentation One) have become basic training tools used by CenTeX to train new employees and volunteers.

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(3) See Educational Telecommunications Delivery Systems -- a book edited by John A. Curtis and Joseph M. Biedenback, and first published 1979 by the American Society for Engineering Education and now in its second printing. (Library of Congress Catalog Card Number 79-53685)

2. The CenTeX^{c} Developed In-Depth Marketing Facts

The data supplied by the Minnesota and Kansas RRS operators -- while invaluable -- did not provide the in-depth characteristics of the individual sensory-deprived population groups which CenTeX planned to serve.

To get these data, CenTeX enlisted the help of the Virginia Department for the Visually Handicapped and the Virginia Council for the Hearing Impaired.

The following are representative of the important information and/or knowledge made available by these two organizations.

(a) Some Critically Basic Demographic Data

The chart on the following page sets forth (by category) the numbers of sensory-deprived persons in the USA and in Virginia's Tidewater areas.(4)

In brief, the sensory deprived Tidewater populations are approximately only ½ that of the national average (3.2% vs. 6.2%). Further, since the average household membership experts tell us, is 2.5 persons (some demographers say 2.8 persons), 15.5% of the nation's population and 8.25% of Virginia's population is directly concerned with the needs of sensory-deprived persons.

For more details, see the page following.

(b) The Specific Sensory-Deprived Population Figures For Each Tidewater Area Jurisdictional Area

To pinpoint the sensory-deprived population targets more accurately, CenTeX^{c} developed the populations via city and county. Further, CenTeX^{c} decided it needed to know the number of legally blind persons --

---

(4) Virginia's Tidewater area begins at a fault in Richmond, Virginia (where ocean tide levels cease to affect the depth of the James River. It is a geographic area which includes all of Virginia Commonwealth land north and south of an axis drawn between Richmond and Virginia Beach, VA, to the borders of the state. The population of Tidewater contains approximately 1/3 of the state's total population.

Sensory-Deprived Populations
in America and Virginia and the Tidewater area of Virginia

POPULATION TYPE	# IN AMERICA	# IN VIRGINIA	# IN TIDEWATER	TIDEWATER % OF VIRGINIA
Visually Impaired	3,048,531[1]	10,232	4,464	43.6%
Hearing Impaired	1,767,046[2]	8,355	3,473	41.6%
Homebound	86,000[3]	3,737	1,646	44.0%
Aged	7,630,046[4]	132,867	51,837	39.2%
Deaf-Blind	Numbers included in Visually-Impaired			
Total	12,531,632	155,191	61,420	39.6%
% of Total Population	6.2%	3.3%	3.2%	39.6%
Number and % of Total Population affected by one sensory-deprived family member	31,329,080 (5)	387,978	153,550	---
	15.5%	8.25%	8.0%	---

[1] Estimate from the Virginia Department for the Visually Handicapped

[2] Estimate from the Virginia Council for the Deaf

[3] Estimate from the U. S. Bureau of Education for the Handicapped

[4] U.S. Census

[5] Demographers establish 2.5 as the average number of persons living in a single american home. Thus, each sensory-deprived person affects the house-life of 2.5 persons.

as well as the total number of persons whose sight was impaired. CenTeX's management also wanted to know the number of Tidewater's citizens over 75 years of age rather than using the more general classification of "aged" for its operating decisions. Based on these more detailed data, for instance, CenTeX executives concluded that much of the truly aged population could be reached via "retirement" homes and a single receiver could, in many instances, therefore, serve multiple users. Further, the detailed data from this study clearly indicated that:

(i) there are, in Tidewater, three central distribution points required for the distribution of SCS services;

(ii) each of these three regions has its own set of daily newspapers (and the users in each region want local, as well as national, news;

(iii) because it is so isolated from the mainland of Virginia, Virginia's Eastern Shore is really a separate region from both the viewpoint of population interests and newspaper coverage.

(iv) Williamsburg is geographically centered in Tidewater and that it could, therefore, be the central point for the development services for all four of the major Tidewater SCS geographic regions (the Richmond area; the Peninsula area; the Norfolk area; the Eastern Shore area; (Williamsburg is approximately 50 air-line miles from the geographic center of each of the four regions.)

(v) The subject study data directly affected CenTeX's design of its SCS telecommunications distribution system. For instance, the subcarrier of a single 50,000-watt FM station with good tower height could reach another FM station with a similar height. The second station could, therefore, regurgitate on its own subcarrier, the programming of the second station (or vice-versa without the use of an interconnecting network.)

The detailed data of this study (which are on the two pages following this one also enabled CenTeX to determine precisely the special user receivers required by SCS-type services.(5)

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(5) This report subsequently provides details regarding system receiving equipment requirements of SCS-type systems.

After CenTeX decided to create its operation, CenTeX learned that another entity was planning a second SCS-type service in the Richmond area.(6) The data in the Chart on page 13, therefore, states data for only three of the basic four Tidewater-area geographic regions, namely Tidewater's Peninsula, Norfolk and Eastern Shore areas. Today, however, CenTeX is delivering its services to the Richmond area only because the Voice's services is not an around-the-clock service, and its services do not include some of the major ones which CenTeX makes available.

3. Some Special Programming REquirements Which CenTeX Believes Are Fundamental To Effective SCS-Type Service

(a) Program Vocabulary and Tempo Requirements

Persons who experience diminishment or elimination of the usefulness of one or both of their primary sensory organs (seeing and hearing - normally used to receive information, according to Lily Page W. Corbett, Director of the Virginia Council for the Deaf) "must necessarily find it more difficult to learn". Further, they learn more slowly than would comparable students with full sensory-capabilities. "for INSTANCE", states Mrs. Corbett, whereas most children, when entering school, have a vocabulary of approximately 25,000 words, the sensory-deprived child, especially deaf ones, depending on the severity of the sensory-handicapped, may have a vocabulary of no more than 15-20 words."

Thanks to Mrs. Corbett's findings, CenTeX^{C} learned early that even newspaper stories should be vocabulary-simplified and delivered at a slow tempo to sensory-deprived persons.

(b) Programming Format Requirements

Sensory-deprived persons require different programming formats depending on the type of deprivation, age and deprivation severity.

Here are some of the factors that must be considered in connection with the five specific population categories currently served by the CenTeX SCS system.

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(6) The Virginia Boice started actual operation more than a year and a half after the CenTeX^{C} service went on the air, and still does not provide services for the hearing impaired or two-way audio/video services for the homebound.

PROJECT SCS II POTENTIAL POPULATIONS

Project: Special Communications Services
Work Responsible Director:

Page 1 of 1
By: ARB
Date: 8/02/78

SERVICE AREA	DEAF	LEGALLY BLIND	NON-LEGALLY BLIND	DEAF-BLIND	HOMEBOUND	AGED (75 OR OVER)		TOTALS
Williamsburg Station								
a. Williamsburg/ James City Cty	48	51	13	-	8	965		1,085
b. Newport News	248	175	60	3	138	2,654		3,278
c. Hampton	218	143	42	2	67	2,088		2,560
d. Poquoson	INCLUDED IN YORK CTY.				1	SEE	YORK COUNTY	
e. York	59	27	7	1	48	487		629
f. Isle of Wight	32	28	21	-	18	515		614
g. Southampton	34	30	20	-	13	542		639
h. Sussex	20	31	10	-	6	356		423
i. Surry	20	10	7	-	1	222		260
j. Prince George	52	9	5	-	2	269		337
k. Charles City	11	14	5	-	10	169		209
l. Henrico	277	90	33	-	180	3,626		4,206
m. New Kent	9	5	6	-	4	146		170
n. King William	13	22	8	-	2	288		333
o. King & Queen	9	12	4	-	2	266		293
p. Gloucester	25	27	10	3	12	651		728
q. Mathews	13	12	3	-	2	577		607
r. Middlesex	11	13	3	-	-	443		470
Hampton Station								
a. Northampton	NA	41	11	-	13	738		803
b. Norfolk	554	543	186	2	344	7,188		8,817
c. Portsmouth	200	183	59	1	134	3,047		3,624
d. Suffolk	81	132	71	-	12	498		794
e. Chesapeake	162	173	35	1	49	1,716		2,136
f. Virginia Beach	310	178	64	2	201	2,070		2,825
TOTALS $	2,406	1,949	683	15	1,267	29,521		35,841

(i) The Visually Handicapped

Obviously, the program format for this category must be an auditory one.

(ii) The Hearing Impaired

The format for this category must be visual, meaning that either "hard-copy", such as that provided by a teletype service,or a visual TV picture with sign-language is useful.

(iii) Deaf-Blind

In this instance, receiption involves the use of a Braille machine.

(iv) The Aged

The aged may require any one of the three formats discussed above (auditory, visual or Braille machine format).

(v) The Homebound

As in the case of the aged, any one of three formats may be required, but one additional methodology may also be essential. In brief, when a homebound person must receive education, CenTeX has determined that two-way audio-visual circuits are often required (when the homebound requirement is body-physical, rather than sensory deficient.(7)

(c) Some User-Pertinent Statistical Data

CenTeX^{c} evaluation studies have indicated some interesting facts regarding CenTeX^{c} SCS users:

(i) approximately 2/3 of them are male;
(ii) a little over 2/3 of them are over 60 years of age;
(iii) the majority do not live alone, but live with others;
(iv) less than 50% have finished high school.

---

(7) Though not typical, in one instance providing two-way education services to two "soft-boned", homebound children let to their insistence that they be permitted to return to their public school rooms (from which they had been absent for more than two years). The children became happier; the school system saved the cost of a home-visitation teacher.

(v) of those who have taken advanced degrees, their accreditations vary from correspondance school courses to medical school graduation;

(vi) one-third of the users are from minority groups;

(vii) approximately 19% of CenTeX's visually handicapped users were born blind.

(d) Programming Content Preference

SCS users have these programming preferences: (i) world/national news; (ii) horoscope copy; (iii) state/local news; (iv) Anne Landers and similar features; (v) special programming such as grooming, hope, financial, government-issue and special legal and social information pertinent to the well-being of those who have the handicap of the user.

(e) Service User Time Habits

The average CenTeX^{c} user utilizes SCS approximately one-and-a-half to two hours per day. The level of service use during weekends drops off substantially. (See Section Four for details.)

Whether these figures are the result of program deficiencies or lack of user needs is not clear. However, CenTeX has recently increased the quality and variety of its evening programming as a result of its most recent indepth user programming evaluation. Further, it is adding as rapidly as possible, the new program suggestions developed by the latest CenTeX user study.

It is believed that the next SCS "consumer" study will determine the effectiveness of these programming additions.

Appendix Documentation Three is a copy of the Program Guide schedule currently being sent SCS users.

Appendix Documentation Four contains the evening programming currently being distributed by the CenTeX^{c} SCS service

The following Category Program Content Analysis Chart lists the major types of SCS programming currently being distributed.

SCS Broadcast Services
Program Content and Sources

		Programming Developed by CenTeX				Programming Provided By Others	
		Solely Local		Local/National		General	
Program Type	Total Hours Per	Total Time	% of Total Program	Total Time	% of Total Program	Total Time	% of Total Program
News	41.0	23.0	35.4	18	27.7		
Magazines	6.5			5.5	8.5	1.0	1.5
Sports	3.5	.5	.8	3.0	4.6		
Books	12.5			7.5	11.5	5.0	7.8
Childrens Programs	.5	.5	.8				
Religious Programs	1.0			1.0	1.5		
TOTAL	65.0	24.0	36.9	35.0	53.8	6.0	9.3

(f) The Importance of a Near-Perfect Microcosm of American Socio-Economic Life

The area for the SCS demonstration program was, indeed, very carefully selected. At CenTeX expense, qualified experts were selected to identify a geographic "laboratory" area representing a cross-section of American socio-economic life. Two different study groups independently selected the Tidewater area of Virginia. The data in the following chart makes clear why both groups of sociologists came up with the same recommendation.

LOCATION FOR TELECOMMUNICATIONS LAB

Population Type	Virginia Total	% of State
Virginians	4,648,494	40.4
Blacks	861,363	60.1
Indians	25,612	45.5
Whites	3,761,514	35.8
Other	4,853	57.1
School Age	1,169,011	39.4
Handicapped	87,263	39.1
Homebound	3,737	48.4
Teachers	63,596	39.7
Physicians	10,188	43.3
Health	58,817	43.6
Over 65	366,021	39.0

PERSONS PER MILE:		
Norfolk	5,400	CITY
Chesapeake	3,062	SUBURB
King & Queen	18.2	RURAL
MEDIAN INCOME:		
Williamsburg	17,069	HI
Northampton	6,909	LO
	11,986	AV

National Average:
Approx. $12,000 (1979 Data)

The reason for CenTeX^{C}'s careful selection of its "test laboratory" location is quite obvious. CenTeX^{C} executives wanted to demonstrate their innovative SCS concepts in an area that provided a microcosm of Americana so that the results of the demonstration project would produce results likely to be replicable and/or useful in other parts of the nation.

Based on the evaluation of the preceding data by the CenTeX advisory boards and its Board of Directors (which includes recognized expertise in the area of sensory-deprived population needs, CenTeX^{C} proceeded to develop the required comprehensive multi-media telecommunications delivery system described by the following Section III.

SECTION III; SYSTEMS CONCEPT STRATEGIES ENGINEERING, DELIVERY-SYSTEM CAPABILITIES AND SERVICE DISTRIBUTION SCOPE

A. Pertinent Background Facts

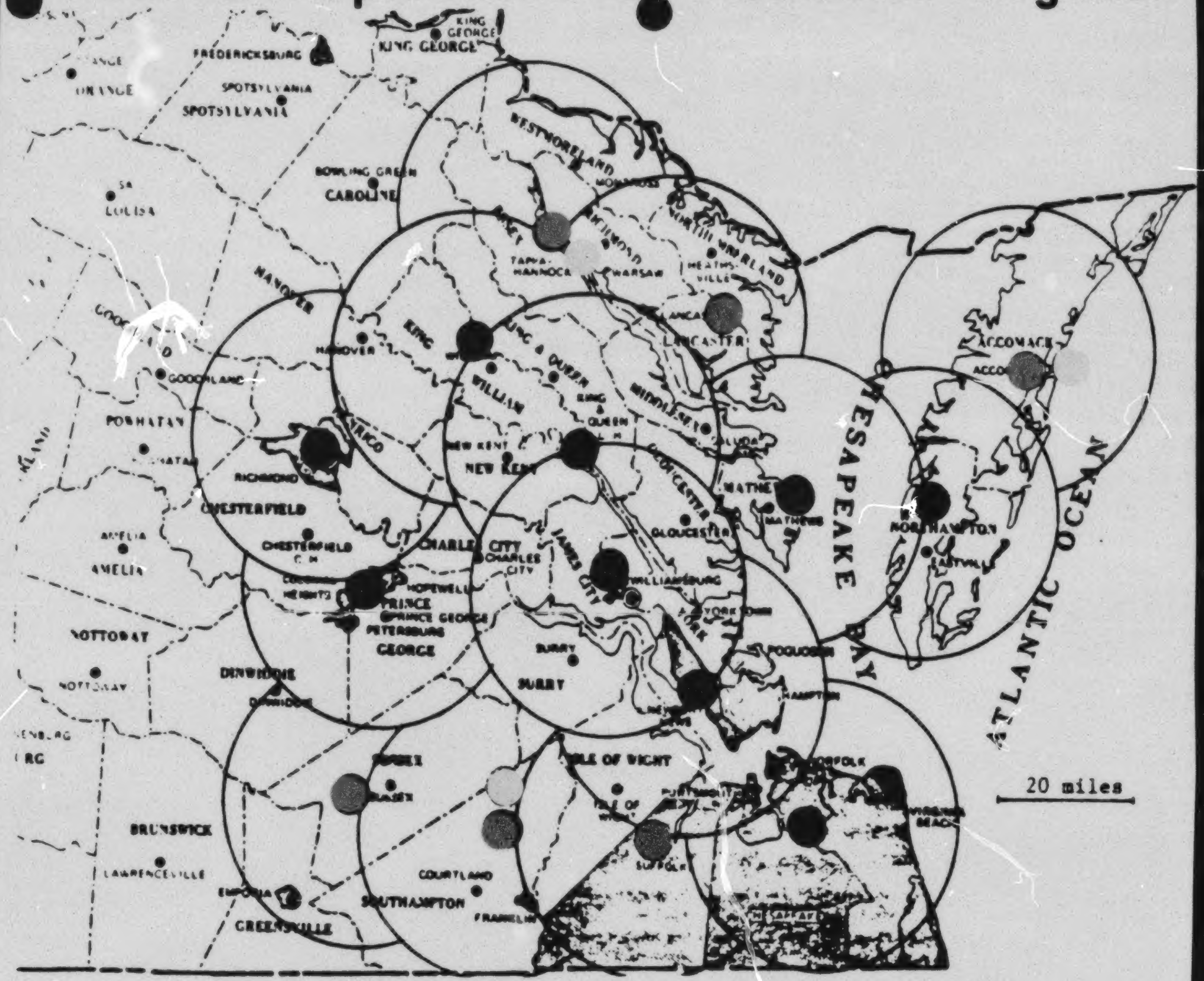
1. The Comprehensive System Design

It is most important that CenTeX's SCS services program is technically and service-wise an integral operating component of a much larger and more comprehensive telecommunications delivery system for the delivery of educational/medical/social service and public entertainment. This basic concept was developed by SCS's project director during 1971 and 1972. The system design engineering for the system has, from its beginning, been done by Jules Cohen and Associates; its regulatory, legal affairs have been directed by Arthur Stambler of the law firm of Lovett, Ford, Hennessy and Stambler, 1901 L. Street, N. W., Washington, D. C., 20036.

The first CenTeX station construction and test was under the direction of James Slate. Alan R. Blatecky was in charge of construction and test of CenTeX-built telecommunication facilities from 1978-1981 and has been entirely responsible for the establishment of the CenTeX SCS facilities built during that period, as well as for the CenTeX stations established in Newport News, West Point and Central Garage, Virginia. Henry L. Morrow, Mr. Blatecky's assistant and now Director of CenTeX's Telecommunications System Installation and Maintenance Department, has been in charge of building the now-in-operation CenTeX Richmond and Virginia Beach stations and is currently building CenTeX stations in Mathews and Northampton Counties. In his current position, Mr. Morrow, of course, is responsible for engineering, installation and maintaining the SCS telecommunications delivery system which is a part of the current over-all CenTeX network expansion.

Because SCS piggy-backs on the total CenTeX telecommunications delivery system operation, it is important for the readers to know, accurately, objectives and facts regarding the CenTeX system operations. This system is, therefore, briefly described by the four following pages.

CenTeX Operations in Tidewater Virginia



KING GEORGE
FREDERICKSBURG
ORANGE
SPOTSYLVANIA
BOWLING GREEN
CAROLINE
LOUISA
WESTMORELAND
MONTROSS
RICHMOND
NORTHUMBERLAND
TAPPAHANNOCK
WARSAW
HEATHSVILLE
HANOVER
GOOCHLAND
KING WILLIAM
KING & QUEEN
LANCASTER
ACCOMACK
POWHATAN
HENRICO
NEW KENT
MIDDLESEX
SALUDA
CHESAPEAKE BAY
CHESTERFIELD
MATHEWS
NORTHAMPTON
EASTVILLE
GLOUCESTER
AMELIA
CHARLES CITY
JAMES CITY
WILLIAMSBURG
YORK
YORKTOWN
HOPEWELL
PRINCE GEORGE
PETERSBURG
NOTTOWAY
DINWIDDIE
SURRY
POQUOSON
HAMPTON
ATLANTIC OCEAN
SUSSEX
ISLE OF WIGHT
NORFOLK
PORTSMOUTH
VIRGINIA BEACH
BRUNSWICK
LAWRENCEVILLE
SUFFOLK
COURTLAND
SOUTHAMPTON
FRANKLIN
EMPORIA
GREENSVILLE
20 miles

1981-1986 (5-Year) CONSTRUCTION PLAN FOR CENTEX CIT-PEDS SYSTEM EXPANSION

- ● Existing ITFS Backbone Stations
- ● Planned ITFS Rib Stations 1982-83
- ● Planned ITFS Stations 1983-84
- ● Planned ITFS Stations 1984-85
- ● Planned ITFS Stations 1985-86
- ● Low Power VHF Stations 1983-84

THE CENTER FOR EXCELLENCE, INC. (CENTEX^{C}) is an IRS-approved, non-profit, applications research and resource development laboratory and operator of this nation's first two-way, telecommunications delivery system designed to distribute educational/medical/social-services expertise and materials; the first system designed to serve simultaneously all five of America's sensory-deprived populations (the visually handicapped, the hearing impaired, the deaf-blind, the aged, and the homebound) via the use of a single FM station subcarrier; the first system to provide home-delivered, informational, educationa, and entertainment programming via the CATV component of its network, as well as across the board privacy, protected (when needed) educational/medical/and social services programs.

The CenTeX^{C} network is already reaching geographic areas serving more than twenty-five percent of Virginia's total population; will soon be reaching areas with more than one-third of Virginia's total population; and, when completed, will not only be serving areas with 41.2 percent of Virginia's total population, but, because (1) it is multi-purpose, (2) it uses low-powered transmitters, (3) it makes maximum use of existing telecommunications delivery system facilities, and (4) because it has been developed from scratch (without the restrictions of archaic telecommunications methodologies and non-modern componentry), it is expected to become the first non-profit telecommunications network to generate its own required operating and system amortization costs.

Here are the specific system specifications which have enabled CenTeX^{C} to develop this order of magnitude increase in the public services productivity of America's non-profit telecommunications educational/medical/social service and entertainment processes.

Specification One: The CenTeX^{C} system has been specifically designed to serve rural and ghetto-located populations, as well as those of the more affluent suburban and city populations.

Specification Two: The CenTeX^{C} system provides two-way voice and video circuitry.

Specification Three: The CenTeX^{C} system makes maximum use of existing resources and facilities to reduce capital equipment system investments and continuing operating costs and the time and costs it takes to install a system and to put it into active, productive service for those it seeks to serve.

Specification Four: The CenTeX^{C} system is a multi-media network.

Specification Five: The CenTeX^{C} system is a multi-channel network with built-in channel expansion capabilities.

Specification Six: The CenTeX^{C} system provides wide-band analog/digital circuitry and, therefore, has the built-in telecommunications capabilities so economically and vitally important to re-establish the effectiveness and vigor of America's business and industrial operators.

Specification Seven: The CenTeX^c system takes full advantage of today's technological cost-reduction potentialities (such as low-power transmitters) and is, therefore, more economical to operate than conventional telecommunications delivery systems with comparable capabilities.

Specification Eight: The CenTeX^c system functions in an area which is a near-perfect microcosm of American socio-economic life. What produces effective results for users in the CenTeX^c system operating area is therefore likely to produce similarly useful results in either part of Virginia or the nation. The near-perfect microcosmic vocation of the CenTeX^c resource development laboratory and test-bed perhaps explain why CenTeX^c-produced curricula (without the aid of a marketing organization) are sold as far away as the states of Alaska and Maine.

Specification Nine: CenTeX^c has identified and acquired the interdisciplinary, experience talents to develop the world's first multi-media, multi-service, multi-productive, full-service public telecommunications network. It, therefore, has the capabilities to develop sufficient user-traffic to make its goal of an entirely user-supported entity a practical one. It also accounts for the fact that private entities, local schools, state agencies and federal departments as well as cooperating CATV operators and FM station operators have invested more than 8.9 million dollars, during the past six years, to establish and maintain the CenTeX^c laboratory and network operations.

Specification Ten: CenTeX^c designed and operates the first "temporary-fixed, two-way telecommunications delivery system" which enabled CenTeX^c to establish new two-way delivery services (such as medical and academic instruction to teen-aged pregnant students in their homes; tutoring for the homebound or slow-learning students; emergency medical consultations at scenes of accidents; special event programming of either an educational or entertainment nature) at relatively low per consumer cost. This station, mounted in a small delivery van, provides the CenTeX^c system a service delivery flexibility and usefulness obtainable by no non-profit public telecommunications entity. This CenTeX^c system capability makes it economically practical for the first time to provide two-way telecommunications circuits between the occasional (not often needed) location and major disciplinary resource centers.

The CenTeX^c system has pioneered many other innovative "firsts". For instance, it established the first system in America to multiplex the subcarrier of FM stations so that all five of America's sensory-deprived populations (the visually handicapped, the hearing impaired, the deaf-blind, the aged, and the homebound) can be simultaneously provided by a single FM subcarrier the multi-formated broadcasting services required by these populations.

Specification Eleven: Multi-origination point capabilities. Because each CenTeX^c station is low-powered, multi-channel facility, the following new public-service capabilities have been added to America's non-profit telecommunications operations:

(a) Each local CenTeX^c consortium partner (on whose property CenTeX^c has established stations) has, in fact, its own broadcasting station and local partners can, therefore, use their local channels for teleconferencing; for the distribution of locally needed information; for locally produced and network-delivered general public entertainment programming.

(b) All disciplinary resources and materials, located in the operating areas served by the CenTeX^{c} network can be (including those of computers, museums, hospitals, rehabilitation centers, and laboratories) economically accessed via the CenTeX^{c} mobile station and economically distributed throughout the entire CenTeX^{c}-served area.

Specification Twelve: The establishment of America's first comprehensive public-service non-profit operating entity intended, when completed, to be capable of generating its own required operating costs and facilities amortization charges. CenTeX^{c} currently has three major operations:

(a) its applications research laboratory and test-bed facilities which today concentrate on the development of needs-based structured educational curricula;

(b) its studio production and materials-development services;

(c) its two-way, multi-media, multi-purpose, telecommunications delivery system.

The first of these three major operations is already self-supporting and has been so for more than two years. The second of these services is expected to become self-supporting during the academic year beginning July 1, 1984; the CenTeX^{c} network when completed during the year 1985, is expected to be completely supported by the user dollars paid for CenTeX^{c} services.

The chart which follows indicates the cost-reduction effectiveness of but one of the many CenTeX^{c} system innovative design strategies . . . the use of low-power transmitters to provide multi-channel two-way communications.

COMPARATIVE POWER REQUIREMENTS CHART

X^2

Type & Number of Stations	Distribution Coverage Area (in sq. mi.)	Approximate Cost of Stations	Approximate Power Costs	On-Air* Time
A. Six two-Channel ITFS stations	4,800	$1,800,000	$ 11,082	24 hrs.
B. 32 one-channel UHF net-work stations	4,800	$9,600,000	$ 49,120	24 hrs.
C. One-channel Public Broad-casting station	5,026	$4,000,000	$100,000	14 hrs.

---

* Actual per day broadcasting time

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B. The Importance of the CenTeX Multi-Media Telecommunications System Capabilities to the CenTeX SCS Demonstration Program

As the preceding four pages make clear, the CenTeX system has in operation all five of the major available land-based telecommunications delivery-system methodologies. (Further, the system, from its inception, to utilize satellite circuits when needed.) (8)

These already-in-place facilities have enabled CenTeX to test the usefulness of all of the available land-based telecommunications delivery-system methodologies to determine which ones are most effective service-and-cost-wise to meet the telecommunications delivery requirements of SCS-type services,

1. without substantial SCS investments in equipments, and,
2. without the time-delays which new system design and acquisition would require.

C. Project SCS HEW/DOE Engineering Responsibilities

CenTeX's HEW/DOE(9) SCS project included three primary engineering goals. These are:

1. Test the viability of having an FM station re-broadcast the SCA program being broadcast on WBCI;
2. Interconnect the SCA WBCI circuit to local CATV systems so that programming could be delivered via the CATV circuits, and,
3. Operationally test the split-channel SCA circuit designed by CenTeX.

---

(8) CenTeX is currently in the process of installing a satellite down-receiver expects also to have access to an up-link satellite transmitter when the down-receive sites have been installed.

(9) The U. S. Department of Health, Education and Welfare (HEW) initially issued grants for the first three years of SCS operations. Towards the end of the third grant year, however, Federal project responsibility was shifted from HEW to the Federal Department of Education (DOE). Fortunately, Anne Erdman, a member of the original HEW project team, was shifted to DOE with the project.

All three of these engineering goals were fully met, tested and analyzed from a cost-effectiveness viewpoint. The CenTeX findings regarding these goals are reported in detail by Appendix, Documentation Five.

A review of Documentation Five will indicate that the use of the subcarriers of 50,000-watt FM stations with reasonable antenna heights can effectively relay programming to-and-from one another. Thus the need for costly interconnect circuits, within 50 air-line miles of each other, is eliminated.

The SCS demonstration program also determined that the use of CATV circuits for the distribution of CenTeX SCS services is most desirable. The use of such circuits eliminates fading and/or reflection factors of over-the-air broadcasting. Further, all of the CATV operators in the CenTeX system area (from Richmond to Virginia Beach) have, on the basis of public and CATV subscriber interests, made available FM-circuits without cost to CenTeX.

However, FM-subcarrier service circuitry is the methodology which CenTeX utilizes to reach rural or other areas which to do have CATV circuits available.

It is important, too, to note that the "splitting" (or multiplexing) of the subcarrier circuit is very practical from an engineering viewpoint, but increases by approximately 50% of the cost of user receivers, and their installation and maintenance costs when over-the-air transmission is the delivery methodology. Therefore, this engineering-feasible concept should be utilized only when subcarrier cost or the number of available subcarrier circuits justify the added expense. (See Appendix: Documentation Six). Further, because multiplexing reduces the available per channel power (the same amount of power divided by the number of channels added by the multiplexing process) the service area when one-channel is used is 25-30 miles but becomes 15 20 miles when the multiplexing process is utilized. Further, the narrow-channels then available reduces program quality.

D. The CenTeX Tidewater SCS Distribution System

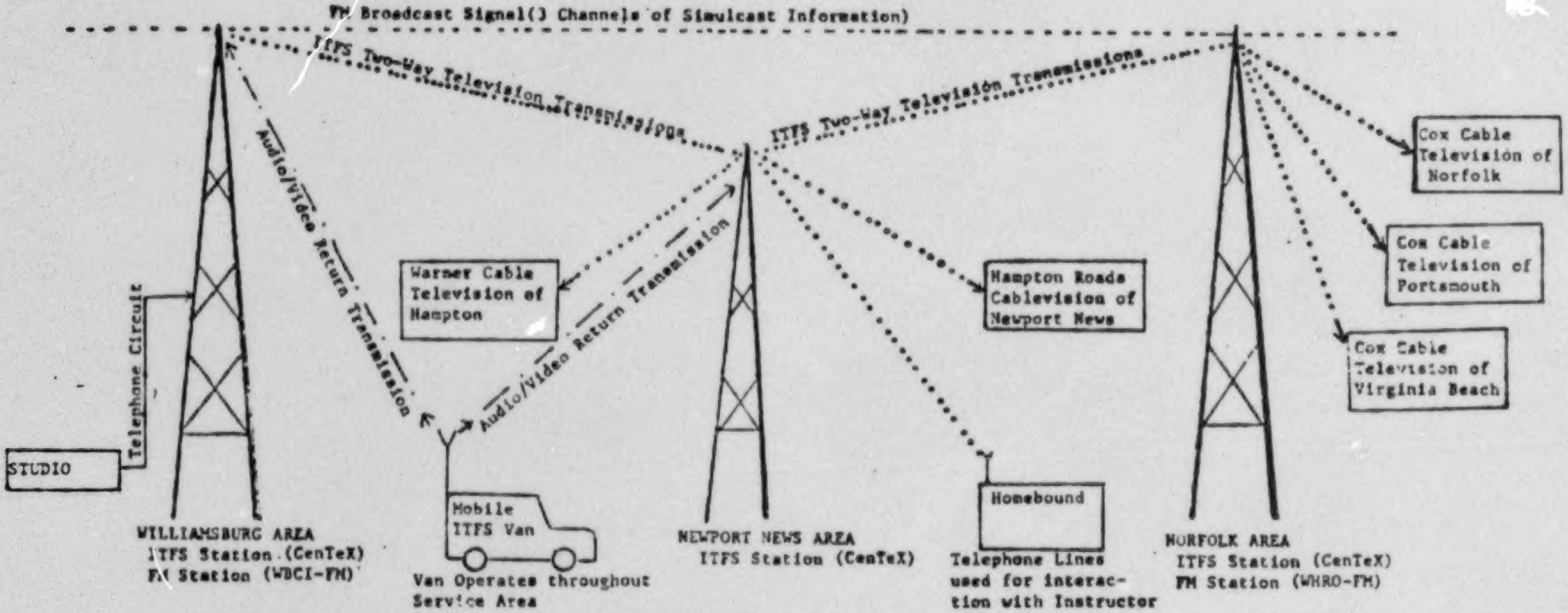
1. The Total CenTeX System Concept

The following page is a system outline chart of a typical operating segment of the comprehensive CenTeX multi-media, multi-purpose, two-way, privacy-protectable, multi-orgination point, multi-channel, analog/digital circuit-capable system which utilizes all six of the available major telecommunications methodologies.

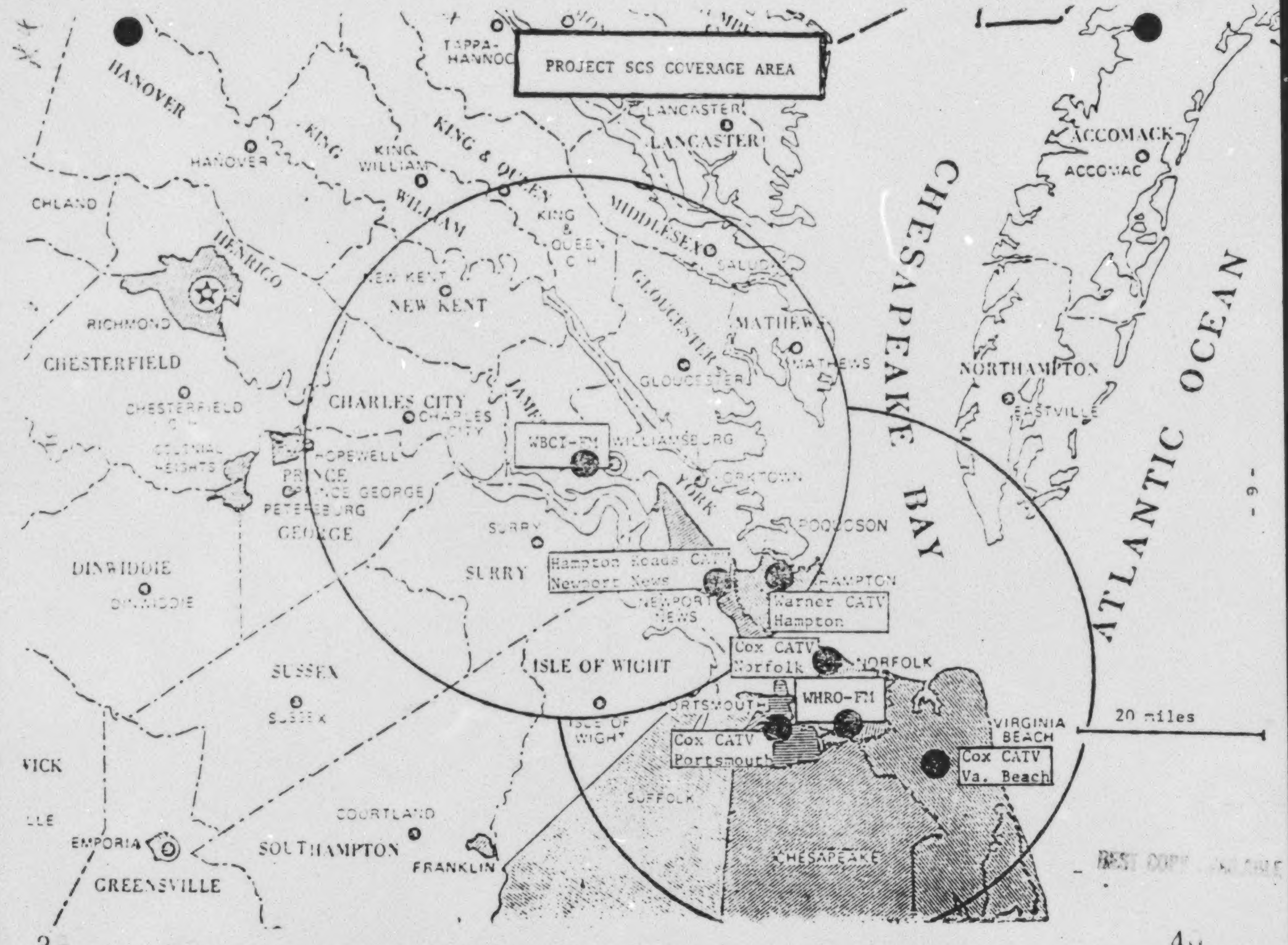
2. The CenTeX SCS System Currently in Operation

The system operations service area -- as outlined by the map on page 9 of this section, illustrates the service the current CenTeX SCS operation.

PROJECT SCS III: A MULTI-MEDIA, MULTI-SERVICE TELECOMMUNICATIONS SYSTEM
(A component of the CenTeX Comprehensive, Interactive
Telecommunications Educational/Medical/Social Services Delivery System—CI-TEDS ®)


FM Broadcast Signal(3 Channels of Simulcast Information)
ITFS Two-Way Television Transmissions
ITFS Two-Way Television Transmissions
Audio/Video Return Transmission
Audio/Video Return Transmission
Telephone Circuit
STUDIO
Warner Cable Television of Hampton
Hampton Roads Cablevision of Newport News
Cox Cable Television of Norfolk
Cox Cable Television of Portsmouth
Cox Cable Television of Virginia Beach
Mobile ITFS Van
Homebound
WILLIAMSBURG AREA
ITFS Station (CenTeX)
FM Station (WBCI-FM)
Van Operates throughout Service Area
NEWPORT NEWS AREA
ITFS Station (CenTeX)
Telephone Lines used for interaction with Instructor
NORFOLK AREA
ITFS Station (CenTeX)
FM Station (WHRO-FM)

(X2)


PROJECT SCS COVERAGE AREA
TAPPAHANNOCK
HANOVER
KING WILLIAM
KING & QUEEN
LANCASTER
ACCOMACK
ACCOMAC
CHESAPEAKE BAY
ATLANTIC OCEAN
MIDDLESEX
SALUDA
HENRICO
RICHMOND
CHESTERFIELD
CHESTERFIELD C.H.
COLONIAL HEIGHTS
NEW KENT
KING & QUEEN C.H.
GLOUCESTER
MATHEWS
NORTHAMPTON
EASTVILLE
CHARLES CITY
JAMES
WBCI-FM
WILLIAMSBURG
HOPEWELL
PRINCE GEORGE
PETERSBURG
YORK
YORKTOWN
POQUOSON
DINWIDDIE
SURRY
Hampton Roads CATV Newport News
HAMPTON
NEWPORT NEWS
Warner CATV Hampton
Cox CATV Norfolk
NORFOLK
SUSSEX
ISLE OF WIGHT
WHRO-FM
PORTSMOUTH
VIRGINIA BEACH
20 miles
Cox CATV Portsmouth
Cox CATV Va. Beach
SUFFOLK
COURTLAND
SOUTHAMPTON
FRANKLIN
EMPORIA
GREENSVILLE
CHESAPEAKE

BEST COPY AVAILABLE

3. The Currently In-Process Expansion of the CenTeX SCS Facilities and Geographic Service Area

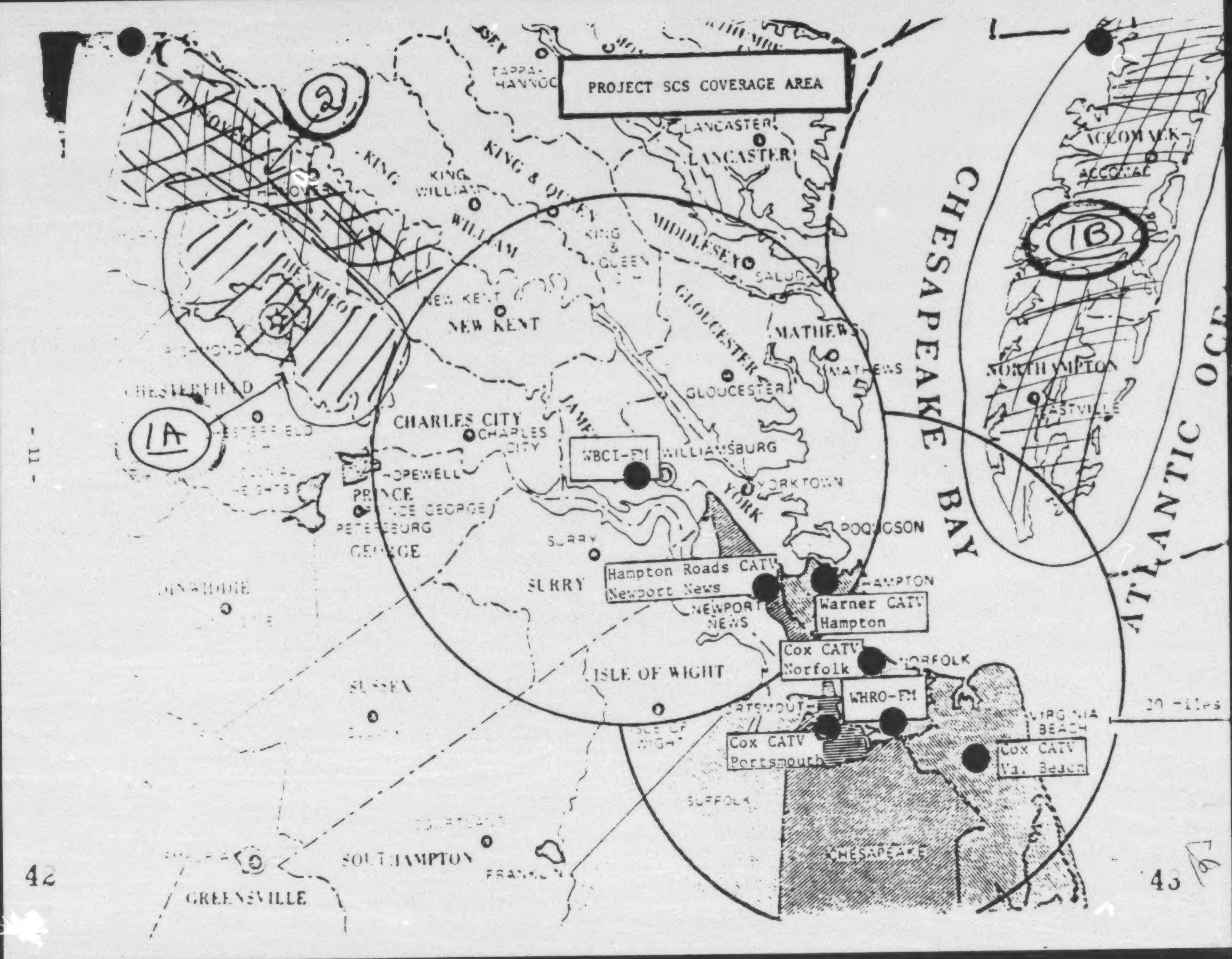
Three facilities and service-area expansions of CenTeX SCS operations are currently in-process. These programs are outlined by the system chart on Page 11.

The shaded areas show the projected geographic coverage of each of the three steps in the expansion program.

1-A. The facilities to provide CATV distribution coverage of the City of Richmond are already installed, and, following the favorable completion of current testing procedures, is expected to be on the air no later than December 31, 1982.

1-B. This geographic system expansion is scheduled to be in operation during the last quarter of 1983.

1-C. This geographic system expansion is expected to go into operation as soon as the pertinent county issues a CATV operators franchise.



PROJECT SCS COVERAGE AREA

2
1A
1B
HANOVER
HENRICO
RICHMOND
CHESTERFIELD
KING WILLIAM
KING & QUEEN
NEW KENT
CHARLES CITY
HOPEWELL
PRINCE GEORGE
PETERSBURG
DINWIDDIE
SUSSEX
SURRY
ISLE OF WIGHT
SOUTHAMPTON
FRANKLIN
GREENSVILLE
SUFFOLK
CHESAPEAKE
TAPPAHANNOCK
LANCASTER
MIDDLESEX
SALUDA
GLOUCESTER
MATHEWS
WILLIAMSBURG
YORKTOWN
YORK
POQUOSON
HAMPTON
NEWPORT NEWS
NORFOLK
PORTSMOUTH
VIRGINIA BEACH
ACCOMACK
ACCOMAC
NORTHAMPTON
EASTVILLE
CHESAPEAKE BAY
ATLANTIC OCE
WBCI-FM
Hampton Roads CATV Newport News
Warner CATV Hampton
Cox CATV Norfolk
WHRO-FM
Cox CATV Portsmouth
Cox CATV Va. Beach
20 miles

6

SECTION IV: THE CENTEX CONTINUING EVALUATION AND SERVICE IMPROVEMENT

A. The CenTeX SCS Evaluation Program

Every two years CenTeX conducts an indepth "consummer study" to:

1. determine user reaction to the quality and content of CenTeX SCA services;
2. identify and understand the meaning and intensity of any service-user complaints; and,
3. stimulate and record user suggestions regarding SCS operations and programs.

It is important, too, that CenTeX employs non-SCS project team members to make what many state sensory-deprived administrators and experienced reading services managers consider the most comprehensive and indepth continuing evaluation study in SCS-type operations.

A copy of the most recent CenTeX Evaluation Summary Report is included in Appendix: Documentation Six.

B. Prompt-Action Policies Rgarding Users of CenTeX SCS Services

As Appendix: Documentation Seven, makes clear, CenTeX's top management quickly makes certain that information developed by independent evaluators and user responses is analyzed by top management and Project SCS Administrators so that prompt action regarding carefully considered and management-approved programming and operation is implemented on timely and effective bases.

SECTION V: FUNDING SOURCES AND OPERATING PROCEDURES LIKELY TO ASSURE THE DELIVERY OF NEEDED SCS SERVICES

Here are the management and service factors which CenTeX has found to be critical to its long-term economic viability.

A. The Absolute Necessity for an Adequate, Well-Trained Corps Of Volunteers

CenTeX has found that one of the corner-stones of long-term economic viability of SCS-type services is a well-trained, numerically adequate corps of volunteers.

For instance, CenTeX's current operation regularly requires the services of not less than forty-five volunteers, who have the abilities to do complementary tasks, such as rewriting newspaper news and special features; delivering the rewritten copy "over the air" or via cable; typing teletype and Braille copy; encouraging friends "to try out" for the SCS volunteer corps; delivering user receivers.

Perhaps the following will indicate the critical fiscal importance of the no-cost volunteer services:

1. It takes an average of two hours to rewrite newspaper news to produce one-hour of SCS broadcast programming for audio transmission; three editing hours for one broadcast hour of news for teletype broadcast (hearing impaired); approximately four hours of editing for one-hour of Braille-machine transmission.

2. It takes approximately two hours to deliver a consummer's receiver and complete the necessary paperwork with the intended user --- not including the time required to have the potential user certified as sensory-deprived by the proper state agency.

3. "Visitation" of users, either in person or on the phone by SCS staff members, has been found essential to maintaining good user relationships and checking the quality of program content and transmission reception. This requirement takes approximately an average of one hour per month per user.

4. CenTeX's two volunteer Boards have monthly four-hour meetings and require each member

to spend at least another eight hours per month helping to develop funding and other SCS-required resources, as well as development of basic SCS policies and public relations efforts.

(e) It should also be noted that volunteers must be more than "bodies". They must be reliable; they must be thoroughly trained for their jobs; and they must have a real desire to do their assignments. Thus, CenTeX finds it must screen volunteer candidates as carefully and accurately as they would a candidate for a high-paying job.

CenTeX has had not only to develop procedures but also accurate record methodologies to maintain the quality of its volunteer personnel.

The following pages are the forms required to maintain proper user relationship and equipment-legality records. These pages also include forms for records of the personal and telephone visit interviews required to check user service satisfaction and to protect CenTeX's loan of its equipment. (CenTeX keeps ownership of receivers to assure they are legally used and to retrieve equipment when the user moves away or dies, so that the unit can continue to be used in the SCS public service.) (pages 3, 4, 5, 6)

Page 7 is a copy of the Certificate which CenTeX arranges to give its volunteers at the end of a year of service.

Page 8 is a copy of an award from Peninsula's Community Volunteer Agency, and which indicates that CenTeX knows how to select, train, and manage a reliable and effective corps of productive volunteer specialists.

B. The Value of Public Relations

Because SCS services are used to alleviate the handicap conditions of sensory-deprived populations, these services have definite interest to media news and special feature writers and producers.

For instance, when CenTeX first started its SCS services, all of the local radio and TV stations gave the announcement good recognition. Further, the local ABC station produced a half-hour "special", which not only went on air in Tidewater, but which the relatives of CenTeX employees saw later in Wisconsin, Minnesota, Illinois and California, via

①

VOLUNTEER INFORMATION FORM: SPECIAL COMMUNICATION SERVICES OF CENTEX
P.O. Box 158/Williamsburg, Va. 23187
(804)229-8541 or TTY 229-0768

Date ____/____/____

Name: ______________________/______________
(Last) (First)

( ) Male ( ) Female Date of Birth:____/____/____

Home Address:______________________________ Home Phone: ______________

Occupation: ______________________________ Office Phone: ______________

Employer: ______________________________
(Company Name)

____
(Town)

Clubs/Affiliations: ______________________________

Hobbies/Interests: ______________________________

Who referred you to the project? ______________________________

Please check the areas that interest you:

( ) Office work
( ) Teletype
( ) Scripting
( ) Oral Reading
( ) Braille typing/proofreading
( ) Preparing news copy
( )Production Work (Taping, dubbing, etc.)

Approximate number of hours that you wish to volunteer:

Per Week: ( ) One ( ) Two ( ) Three ( ) Four ( ) Five
Per Month: ( ) One ( ) Two ( ) Three

Days/Times most convenient for volunteer work:

	Morning	Afternoon	Evening	
Monday	( )	( )	( )	______
Tuesday	( )	( )	( )	______
Wednesday	( )	( )	( )	______
Thursday	( )	( )	( )	______
Friday	( )	( )	( )	______
Saturday	( )	( )	( )	______
Sunday	( )	( )	( )	______

Mail File ☐ Index File ☐ Date File ☐

PH/c ___ HI/a ___ HI/c ___

NAME: ____________ / ____________

DATE OF BIRTH: ___/___/___

ADDRESS: ________________________

____________ / VA / ____________

M ( ) F ( )

PHONE: ____________ (H) ____________ (B)

DIRECTIONS TO THE HOUSE:

____

____

____

____

OTHER FAMILY MEMBERS ELIGIBLE FOR SCA SERVICES:

NAME:	DATE OF BIRTH:
	/ /
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	/ /
	/ /
	/ /
	/ /

NOTES: ________________________

____

____

____

48

____

RECEIVER #:	DATE:	INIT:
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SURVEY DATES:

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49

BECAUSE OF MY JOB, I AM UNABLE TO LISTEN TO THE RADIO IN THE

( ) MORNING
( ) AFTERNOON
( ) EVENING

I AM MOST LIKELY TO LISTEN TO THE RADIO DURING THE FOLLOWING HOURS:

____
____
____

I PARTICULARLY ENJOY LISTENING TO THE FOLLOWING PROGRAMS:

( ) TO YOUR GOOD HEALTH
( ) WEEKLY OUTDOORSMAN
( ) GOOD OLD DAYS (NOSTALGIA)
( ) CONSUMER'S ADVOCATE
( ) EXTRA INNINGS (SPORTS)
( ) STRICTLY FEMININE
( ) NEWS FROM THE CABLE NEWS NETWORK
( ) EDITORIALS
( ) OUTLOOK (PROGRAM ON VISUAL IMPAIRMENT)
( ) HOME ON THE RANGE (COOKING)
( ) VIRGINIA ON TOUR (WALKING TOURS)
( ) VIRGINIA GAZETTE
( ) BOOKS
( ) NEWS FROM THE NEWSPAPERS (7-8:30 PM)

IF SCHEDULING PERMITS, I WOULD ENJOY LISTENING TO THE FOLLOWING PROGRAMS THIS FALL:

PROGRAM:	TIME OF DAY:	PROGRAM:	TIME OF DAY:

③

CENTEX / SCS SURVEY

8 / 81

NAME ______________________________

ADDRESS ______________________________

____

____

MALE ( )   FEMALE ( )

HOME TELEPHONE NUMBER ______________________________

DATE OF BIRTH ____/____/____

PLEASE REPORT ANY CORRECTIONS TO YOUR ADDRESS AS SHOWN ABOVE :

____

____

____

ARE YOU HAVING GOOD RECEPTION ON YOUR RADIO RECEIVER? ( ) YES   ( ) NO

IF YOU ARE HAVING TROUBLE WITH YOUR RADIO, PLEASE DESCRIBE THE PROBLEM: ______________________________

____

I WOULD PREFER TO RECEIVE MY PROGRAM SCHEDULES AND OTHER MATERIALS IN:

( ) BRAILLE   ( ) LARGE PRINT

The Center for Excellence, Inc.

in cooperation with

The Virginia Department for the Visually Handicapped

hereby recognizes

for volunteer services provided to the

Special Communications Services Program

Virginia's First Radio Information Service

John A. Curtis, Founder/President
The Center for Excellence, Inc.
Williamsburg, Virginia

William T. Coppage, Commissioner
Virginia Department for the
Visually Handicapped

Certificate of Recognition

A Grateful Community Salutes

CENTEX RADIO INFORMATION SERVICE

Volunteer Group Service Award

with heartfelt thanks.

This certificate symbolizes a bond, which unites all who give of themselves in unselfish service. It is from the hearts of such individuals and groups that a better world and a brighter day will evolve.

Voluntary Action Center

April 30, 1981

Date

Gene Blatecky

Nominator

Centex

Agency

⑥

⑥

the ABC affilliates who received it from ABC's national news distribution service.

A number of professional magazines (such as Educational and Industrial TV Magazine) have run eight-page feature articles regarding CenTeX's network and its SCS component.

Engineering Magazine, the monthly publication of the American Society for Engineering Education, --- the leading journal in its disciplinary field --- included the CenTeX SCS system in its latest book on Educational Telecommunications System. (See Appendix: Documentation Two)

American Education, the official monthly magazine of the Federal Department of Education has also run a nine-page article (and front cover recognition) on the CenTeX system and included very generous recognition of the SCS public-service significance.

Perhaps most important has been the continuing local newspaper recognition of CenTeX's SCS operation.

Appendix: Documentation Eight contains copies of some of the local SCS press recognition. Continuing, favorable, local press support is most important for these reasons:

1. it creates creditability for SCS-type operations;

2. it stimulates service-club interest in SCS. Below are some of the service clubs which contacted CenTeX after reading about its public services in the local press:

APPLICATION FOR ASSISTANCE

by the Jaycees of Williamsburg (Doug Danford)

by the Pilot Club of Williamsburg (Mrs. Theresa Runyans)

by the Lion's Club of Williamsburg (W. M. Rosser, Jr.)

by the SERTOMA Club (Ron Campana)

by the Soroptimist (Mrs. Williemae McCracken)

by the Rotary Club (Gordon Vliet)

by the Kiwanis Club, Colonial Capitol (Don Messmer)

by the Kiwanis Club of Williamsburg (George Brattan)

3. it stimulates potential volunteer interest;

4. it "warms up" local corporate and individual givers.

C. Produce a Monthly Newsletter

Though CenTeX^{C}'s SCS operation has the equivalent of only four full-time paid employees, it requires not less than an additional volunteer corps of approximately 65 persons to keep the CenTeX operation going. These persons include:

	the personnel needed	the number of persons required
1.	The day to day operational volunteer corps	45 persons
2.	Specialists, whose services are from time-to-time required (accountants, lawyers, engineers, regulatory experts)	7 persons
3.	Well-trained, ready-to-go specialists who are willing to meet temporary personnel emergency requirements	5 persons
4.	In-training volunteers for the replacement of volunteers who leave the corps for any reason (such as home relocation)	8 persons
	TOTAL	65

D. The Importance of a Monthly Newsletter

What is the most effective means (in addition to continuing favorable local "press" stories) to keep an organization of more than 65 "casual" non-paid specialists interested in "working for nothing"?

CenTeX has determined that the most effective tool has been its monthly Volunteer Newsletter. See Appendix: Documentation Nine.

This medium is cheap, but can be made very interesting and volunteer-stimulating. Further, though the Volunteer Newsletter began as its its title suggests, as an employee-interest stimulating publication, CenTeX has found that its content has other basically important bi-product promotional uses, such as the following:

1. A newsletter information service to SCS user homes (fellow home occupants can read the document to their blind; others read it themselves)

2. Programming material for delivery over the SCS broadcasting circuits to keep SCS "families" up-to-date regarding such items as new programming, operational changes, and the SCS personnel who serve them.

3. Stimulating mailings to:

   (a) the press,

   (b) the commercial entities either already supporting the CenTeX SCS operation or having the potential to do so,

   (c) non-commercial groups (such as service clubs, individual contributors, jurisdictional and church leaders, who can create (or who are already contributing) operational, jurisdictional and fiscal support for CenTeX SCS operations.

E. The Selection of the Proper Headquarters Location

CenTeX^{C} has determined that only a geographic area which can support its own daily newspaper system can support an SCS-type operation.

CenTeX believes this is a good decision guide for these reasons:

1. Such locations have sufficient population to provide the capabilities and required number of volunteers.

2. Such communities have the minimal numbers of sensory-deprived to justify SCS-type services.

3. Such communities have the interested wealth (if properly identified and utilized) to support SCS-type operations (such as United Way, service clubs, commercial and non-commercial organizations and individuals from whom CenTeX is currently receiving fiscal support).

4. Such communities usually have an FM-station with sufficient power (50,000 watts)

   (a) to deliver SCS-type services to rural areas up to 35 miles away;

   (b) to reach the similar stations in neighboring regions to re-broadcast already produced special SCS programming thus eliminating costly networking (interconnection) costs and bringing in useful program services from neighboring SCS-type operations.

5. Such communities usually have CATV distribution systems which usually see the public relations wisdom of supplying "free" channels for the kind of public services which a CenTeX type SCS operation makes available.

F. The Importance of Chamber of Commerce Support

CenTeX has determined that the quickest way to identify and keep up-to-date its list of regional professional and trade associations corporations, fellow public-service entities, and individuals of value to CenTeX's SCS operation is to maintain a close and regular relationship with the management of local and regional Chambers of Commerce. For evidence of the scope and depth which such a relationship can provide, please review Appendix: Documentation Ten.

G. The Potential Importance of Local and Regional Educational Entities

Most school managements, both public and private, are truly interested in supporting SCS-type services. So also are the managements of local higher education entities and especially the schools of education at such institutions.

For instance, the principal of Catholic Walshingham Academy in Williamsburg and the Superintendent of Diocesan Catholic Schools have given effective support to CenTeX and its services before any CenTeX facility was "on air" to deliver SCS-type services.

The College of William and Mary initially provided the CenTeX SCS operation its space for offices and studio.

When the CenTeX SCS operation required more space, the Williamsburg/James City School Division supplied CenTeX a trailer and the necessary utilities, parking space and custodial services required for its current headquarters operation.

H. The Importance of State Agency Support and the Legal and Fiscal Support They Provide

The importance of support from state agencies with responsibilities for sensory-deprived populations is a basic SCS-type operational requirement for these purposes.

1. In the Matter of Obtaining Accurate Marketing Information Easily and Without Cost

In order to develop convincing fiscal-support activities, SCS personnel must know the facts regarding the populations they seek to serve. Without the help of the pertinent Virginia state agencies, CenTeX personnel could never have so quickly learned the facts (as has been previously noted by this report) nor have identified, built and operated from "day one" the facilities and programming requirements of the SCS market.

I. The Importance of Pertinent State Agency Support

1. In the Area of Personnel Training

The knowledge supplied by state agencies - especially that supplied by the Virginia Department of Education's Special Education Division - enabled CenTeX to develop the necessary experience-based training programs and information services needed for the training of its operating and volunteer personnel. For an example of the scope and depth of the personnel training programs which CenTeX has developed "to sharpen the skills" of its staff, see Appendix: Documentation Eleven.

2. In the Area of Fiscal Support

Without the fiscal support of the Virginia Department of Education, the Virginia Department for the Visually Handicapped, and the recently developed fiscal support of the Virginia Department of Telecommunications, CenTeX's SCS operation would not today be in operation.

J. Federal-Level Support: The Way to Get Things Going

1. Fiscal Support

Without the $243,434 made available by the Federal Bureau of Health and Welfare, CenTeX would not have been able to get started. This sum - made available over a three year period beginning in February, 1978, enabled CenTeX

(a) "to learn its business";

(b) to acquire and train the skills;

(c) to build its studio;

(d) to acquire its basic distribution facilities and to get into a position where local, state and private funding resources are willing to continue the necessary funding support for CenTeX's SCS operations.

2. Marketing and Information Support

Federal agencies, like their state counterparts, have volumes of reports and data pertinent to SCS operations located all over the nation. The proper persons in these agencies have identified and in many instances obtained copies of such experience and pertinent data to help CenTeX's ability to do its job. The Bureau of Education for the Handicapped (Drs. Herman Saettler and Paul Andereck) have been especially useful in these regards.

K. Special Legal Considerations

1. Copryright Vigilance

Thanks to the far-sighted wisdom of the U.S. Congress, current copryright laws permit the use of all copyrighted material, without cost, for programming distribution to the visually handicapped and the deaf/blind. The special copyright privileges provided by the U.S. copryright laws, however, do not give the same broad exemptions in connection with programming distributed to the deaf and aged.

It is, therefore, most important that operators of SCS-type operations with the multi-population targets of the CenTeX type do the following by making certain

(a) that programming is distributed by a means which assures that the distribution is limited to only sensory-deprived populations;

(b) that the degree of deprivation is such that would-be users can be qualified to receive the distributed programming;

(c) that program reception can only be received by the available and legally accepted special FM receivers considered legally acceptable to copyright owners. (Such receivers sell for ($70-$120 each).

(d) the SCS operation keeps ownership and surveillance of location and receiver use to preclude misuse of the equipment and so that retrieval of units is readily accomplishable whenever evidence of receiver misures becomes available.

To assure proper qualification of would-be service users, CenTeX has enlisted the cooperation of all the specific state agencies responsible for one or more sensory-deprived groups. When would-be applicants come to CenTeX for service, their names are sent to the appropriate entity for verification before a receiver is provided the potential user.

2. IRS Exemption

It is important that, if properly set up and operated, CenTeX-type SCS operations can be approved by the Bureau of Internal Revenue under laws which permit fiscal givers to SCS operations to write off their SCS donated contributions.

3. Sales and Other State Tax Exemptions

CenTex-type SCS operations should make certain that they are given tax exemptions which they are eligible for in the geographic areas in which they operate. (Sales tax exemption is one such privilege).

L. Organizational Requirements and Considerations

CenTeX SCS operations experience indicates that the following are significant organizational requirements and considerations:

1. Organizational Set-Up and Personnel Requirements

The chart on the following page outlines the organizational set-up which CenTeX has found minimal in cost and adequate in action to keep a CenTeX-typ SCS operation economically viable.

The minimal paid for personnel must include:

(a) a manager (see 2.0 of the chart);

(b) an assistant manager with technical knowledge of studio and telecommunications delivery system equipment and regulation requirements;

(c) 65 part-time volunteers;

(d) 1/5 of a man-year of specialist time divided as follows:

  (i) 5% for general management purposes;

  (ii) 5% for regulatory purposes;

  (iii) 5% for legal purposes;

  (iv) 5% for accounting purposes

2. The Elimination of Unnecessary Paperwork and Meeting Times

Remember, the bulk of work-time and talent required for a CenTeX-type SCS operation is volunteer-supplied.

Volunteers require the minimum amount of specifically targeted education; very clearly defined responsibilities; and will not tolerate excessive amounts of paper work.

3. The Proper Consideration of the Work-and-Time Capabilities and Requirements of the Individual Volunteer.

Keep in mind the fact that many volunteers are retirees, some are active family and parent persons; others are college-aged persons. The work capacities and time availability of individuals in such broad personnel spectrums vary, and volunteer work assignments must recognize these facts.

4. Minimum and Reasonable Annual Operating Costs of a CenTeX-Type Regional SCS Operation.

The minimum and reasonable annual operating costs of a multi-population, multi-service SCS operation of the CenTeX-type are believed likely to be as follows:

	Annual Budget	
Budget Item	Minimum Dollar Requirements	Top Reasonable Dollar Requirements
(a) Personnel	$ 30,000	$ 55,000
(b) Housing Facilities	$ 7,500	$ 7,500
(c) Materials	$ 2,500	$ 5,000
(d) Telecommunications	$ 5,000	$ 5,000
(e) Telephone	$ 3,000	$ 3,600
(f) Travel Costs	$ 3,500	$ 3,500
(g) Other	$ 2,000	$ 2,000
TOTAL	$ 53,500	$ 81,600

5. Annual Per User Service Costs

During its current operating year, CenTeX believes it will be providing programming services to approximately 1,000 sensory-deprived users. CenTeX's budget for the current operating year of its SCS operatings is $53,500. Its projected per-user service cost is therefore $ 53.50.

6. The Annual Costs of the Projected Expansion of the CenTeX SCS Service Areas

The costs of providing adequate CenTeX-type SCS services in the Richmond City/Henrico and Hanover County areas (Expansion Projects 1.A and 2) have been estimated at $25,000 per year; those for Virginia's Eastern Shore (Expansion Project 1B) $22,000 annually.

The expansion program is expected to produce an additional CenTeX user enrollment of not less than 1,500 persons. So doing would reduce the CenTeX SCS annual per user cost to $40.20.

7. The Time and Dollars Required to Start and Make Economically Viable a Regional Boradcasting Service with CenTeX's SCS Service Scope and Geographic Coverage

It has taken CenTeX four years to get its SCS operation to the point where it appears that its operation will next year be able to attract sufficient funding to meet both its capital equipment and operating budgets. Thus, it appears that

(a) a time-period of five years should be scheduled to establish an economically viable five-population, sensory-deprived regional broadcasting service; and

(b) approximately $350,000 (approximately $200,00 for operations and $150,000 for capital equipment) would have been required for the five-year, establishment-process.

8. Programming and Distribution System Cost Saving Opportunities

Except for daily news programming much of the programming requirements (probably about 50% of the total needed) can be obtained from existing SCA program libraries and other SCA operators.

The best availa[illegible]ource for much of this programming is the Association of [illegible]o Reading Services. Appendix: Documentation Twelve gives the address data for this library and for all existing ARRS members who cooperate and exchange programming.

It should be noted, however, that the exchange of programming often requires much modification for effective local use, and/or reduction to different formats such as those required for teletype and Braille machine transmission.

Another major cost reduction opportunity (namely the use of existing facilities on a low-or-no charge basis) has already been adequately described by this report.

9. The Importance of Precise, Cost-Control and Accounting Methodologies

The confidence of funding sources and volunteer workers is directly proportional to the care with which SCS-type operations spend and account for their expenditures whether for programming, personnel, promotions or other purposes.

CenTeX has, therefore, worked hard to create an easily usable, accurate accounting and cost-control system.

Appendix: Document Thirteen (which progressively records the spending of $243,434 of Federal funding) is an example of the type of cost-control system which CenTeX has developed.

10. Special Factors To Be Considered, Digital to Analog Methodologies

It should also be noted that there are two distribution methodologies available to meet the broadcasting needs of the hearing sensory-deprived population. One is the captioning of standard, nationally delivered broadcast programming. The other involves the use of teletype transmission.

CenTeX chose the latter method for these reasons:

(a) the captioning of standard broadcasting programs is currently costly to the user, as well as to the provider;

(b) the teletype approach is more easily providable through the whole broadcast day;

(c) the teletype approach can provide two-way services between users and can distribute other programming services;

(d) CenTeX believes that eventually service delivery systems for the sensory-deprived will, in the future, not only rely in many instances on digital transmission, and current teletype equipments and services could shift quite easily to all-digital network systems.

SECTION VI: REGULATORY, LEGAL, POLICITAL AND OTHER BARRIERS TO SCS OPERATIONAL EFFICIENCY AND ECONOMIC VIABILITY

A. Barrier Number One - Political

Many, if not most, non-profit public service entities are more interested in serving those who need them than feathering their own nests. Some, however, are not.

Here are some examples of the "are nots" who have created barriers to impede CenTeX's SCS operating efficiency:

1. even though CenTeX was the first Virginia operated SCS-type system by a year and a half or more;
2. even though the CenTeX SCS operation is still the only Virginia operation of this type to provide services for the hearing impaired, as well as the other four sensory-deprived populations;
3. even though CenTeX's is the only Virginia non-profit entity able to provide two-way audio/video educational and psychological curcuits between resource centers and the sensory-deprived in its service areas;
4. even though the CenTeX operation is the only 24-hour per day, seven-days-per-week,SCS-type service in Virginia (and possibly the nation), a Virginia state agency recommended that another SCS-type operation take over CenTeX's operation.

When the factors detrimental to the public interest were made public, the pressure for this take over was reduced. However, when the state agency divided up its limited $50,000 among Virginia-headquartered SCS operations:

5. it allocated extra dollars to the entity endeavoring to take over the more comprehensive CenTeX SCS operation so that entity could establish a communications link between itself and a distant Norfolk station which was already working with CenTeX to develop a joint SCS operating experiment,; and
6. despite the fact that CenTeX already has a circuit that could do the job.

It should also be noted that this same Richmond located entity has been supplying programs to an entity which operates a lesser service area for some of the sensory-deprived categories in the same geographic area in which CenTeX has already been serving these and other other sensory-deprived population categories very satisfactorily.

This unnecessary intrusion so confused some of CenTeX's current local funding sources that at least one of them may have held up CenTeX support for a year to determine the reasons for similar service operations in the same geographic area, when so much of Virginia is not yet providing the broadcasting services useful to the Commonwealth's sensory-deprived populations.

B. Barrier Number Two - Federal Communications Commission Regulations and The Marketing Changes Based on Same

There are 78 U.S.A. suppliers of broadcasting services for the sensory-deprived today using the sub-carriers of FM stations to deliver direly needed programming.

At this writing, the Federal Communications Commission is considering two modifications in its current regulations regarding FM station sub-carrier use.

One of these concerns the use of such sub-carriers for quadraphonic broadcasting; the other would open up the use of the sub-carriers for the transmission of commercial data - even the sub-carriers of public broadcasting stations.

Depending on the content of the final F.C.C. regulations, the regulatory changes and the marketing modifications which they might develop could cause very serious financial and/or broadcasting service difficulties for the 78 suppliers of broadcasting services for America's sensory-deprived populations.

C. Barrier Number Three - Common-Carrier Telephone Tariffs

Many of today's special communications services are distributed by the nation's every-where-present common carrier telephone systems. As has been widely publicized, the recent dismemberment of the Bell System and the resultant divorcing of the Bell local and regional operations from the parent company, is certain to increase substantially the cost of the distribution methodologies currently used to supply special services for the nation's hearing impaired populations.

Yes, services for America's sensory-deprived began and went far during the '70's, but it will require a lot of technical skills and "politicking" to continue through the '80's the reaped progress which these services made in the public interest during the '70's.

CenTeX's SCS August 1982 Schedule

CenTeX's Special Communication Services (SCS) are broadcast 24 hours a day, seven days a week to meet the unfilled, informational and entertainment needs of Tidewater's sensory-deprived populations; the hearing-impaired, the aged, the homebound, the visually-impaired and the severely-handicapped. The special informational programming for the hearing-impaired, however, is broadcast 6:30-7:00 PM Monday, Wednesday and Friday- indicated as RTTY for Radio TeleTYpe- in the attached schedule chart.

SCS currently broadcasts 10 hours of local programming on weekdays, augmented by 5 hours of C-Span (live coverage of Congresssional proceedings) and 9 hours of Cable News Network audio. Weekend programming consists of the audio portion of Cable News Network.

The fall CenTeX SCS schedule will be available on September 1, 1982 and will include the increased local-programming hours recommended by the SCS listeners interviewed by CenTeX during its recent (June, 1982) SCS Listener Survey.

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
7:00 - 7:30 AM		TIMES-HEARALD NEWS UPDATE			
7:30 - 8:00 AM		WEATHER/NATIONAL & WORLD NEWS			
8:00 - 8:30 AM		STATE/LOCAL NEWS, WEATHER			
8:30 - 9:00 AM		LOCAL FOCUS: ITEMS OF INTEREST			
9:00 - 9:30 AM	Star World	Fix-It	On-the-Range (cooking show)	Gazette-Journal (Gloucester-Mathews)	Journal and Guide (Norfolk)
9:30 - 10:00 AM		SPORTS (DAILY)			
10:00 - 11:00 AM		REPLAY OF 7:30-8:30 AM NEWS PROGRAM			
11:00 AM - 12:00 noon	To Your Good Health	Travel Show	Museums	Green Thumb	Weekly Outdoorsman
12:00 noon - 5:00 PM	C-Span	C-Span	C-Span	C-Span	C-Span
5:00 - 5:30 PM	TIMES-HEARLD NEWS AND WEATHER UPDATE				
5:30 - 6:00 PM	Virginia Gazette	Virginia Gazette	Local Focus	Gazette-Journal (Gloucester-Mathews)	Journal and Guide (Norfolk)
6:00 - 6:30 PM					
6:30 - 7:00 PM	RTTY		RTTY		RTTY
7:00 - 8:00 PM	CenTeX: Imagine That, Inside Ou[illegible] Think About	CenTeX: School Law for Educators (7:00 - 10:00)	CenTeX: Imagine That, Inside Out, Think About	CenTeX: School Law for Educators (7:00 - 10:00)	CenTeX: Imagine That, Inside Out, Think About
8:00 - 9:00 PM	CenTeX: Rights & Responsibilities		CenTeX: Rights & Responsibilities		CenTeX: Rights & Responsibilities
9:00 - 9:30 PM	CenTeX: Cross Roads		CenTeX: Cross Roads		CenTeX: Cross Roads
9:30 - 10:00 PM	CenTeX: On/About Instruction		CenTeX: On/About Instruction		CenTeX: On/About Instruction
10:00 PM - 7:00 AM	Cable News Network	Cable News Network	Cable News Network	Cable News Network	Cable News Network

CURRENT AND PROJECT PARTICIPANT POPULATIONS

TIME PERIOD	WILLIAMSBURG STATION				NORFOLK STATION				WILLIAMSBURG & NORFOLK				EASTERN SHORE STATION				TOTAL			
	Print Handi-capped	Aged	Deaf	Total	Print Handi-capped	Aged	Deaf	Total	Print Handi-capped	Aged	Deaf	Total	Print Handi-capped	Aged	Deaf	Total	Print Handi-capped	Aged	Deaf	Total
Current	50	18	35	103	--	--	--	--	50	18	35	103	--	--	--	--	50	18	35	103
% of Potential Population	7%	.1%	4%	1%	--	--	--	--	2%	0.079%	2%	0.3%	--	--	--	--	2%	0.6%	2%	0.3%
Dec. 1980	140	40	55	235	9	0	9	18	149	40	64	253	--	--	--	--	149	40	64	253
% of Potential Population	197%	.4%	7%	2%	12%	--	1%	0.04%	6%	0.2%	3%	1%	--	--	--	--	6%	0.1%	3%	1%
Dec. 1981	190	80	65	335	209	110	99	418	339	190	164	753	--	--	--	--	399	190	164	753
% of Potential Population	25%	1%	8%	3%	13%	1%	7%	2%	17%	1%	8%	3%	--	--	--	--	16%	1%	7%	2%
Dec. 1982	290	180	75	545	409	310	139	858	699	490	214	1,403	50	50	50	150	749	540	264	1,553
% of Potential Population	38%	2%	9%	5%	25%	2%	10%	5%	30%	2%	10%	5%	30%	2%	96%	6%	30%	2%	12%	5%
Total Population	756	9,956	800	11,512	1,604	15,396	1,370	18,370	2,360	25,352	2,170	29,882	164	2,510	52	2,726	2,524	27,862	2,222	32,608

DOCUMENTATION ONE

How To Establish and Operate A Radio Reading Service

by Roseanna Hurwitz (University of Kansas
Radio for the Blind and Physically Handicapped)

Stanley Porter (Minnesota State Service
For the Blind and Visually Handicapped)

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How to Establish and Operate A Radio Reading Service Via SCA

Rosanna Hurwitz and Thomas Fish
The University of Kansas

A Radio Reading Service (RRS) provides printed information via closed circuit methods for people who are unable to read for themselves. Use of the service offers the possibility for a more independent life style to the blind, the physically handicapped and the elderly.

To establish a Radio Reading Service is a challenging experience. Planning surely spells the difference between real success and demoralizing failure. This chapter is written as a guide for those who are interested in starting their own RRS.

The Audio-Reader Service at the University of Kansas was launched through the generous efforts of a local philanthropist who decided the blind should have access to daily newspapers, books, and other information through radio. Stan Potter, director of services for the blind in Minnesota, who had pioneered the first Radio Reading Service,* told her how the service in St. Paul operated. She bought a new transmitter for the main channel–KANU-FM–tape recorders, a cart machine, a turntable and 500 receivers, and hired two staff members.

Audio-Reader, the second Radio Reading Service in the United States, went on the air October 11, 1971. Lacking organized support for the venture, our benefactor carried the costs by herself for a year-and-a-half. Several concerned members of the Kansas legislature managed to get the Audio-Reader added to the state library budget for one year, and the University of Kansas agreed to administer the program if the legislature would fund it the following year. That was five years ago. Our status remains much the same today.

How to Start Your Own RRS

In order to launch a Radio Reading Service that will continue to operate and grow, there are several important factors to consider. The priorities are as follows:

1) Form a general advisory committee of agency representatives, individuals, and private organizations to determine the needs and interests of the area to be served and to find eligible clients.

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*See page 99.

2) Determine the availability of subcarriers of preferably public radio stations, and the interest of these stations in making a subcarrier available for this purpose.
3) Find an agency that shares your goals and is willing to provide at least some sort of basic budget and administer the service.

The latter might be an agency for the blind and visually handicapped, a state telecommunications agency, a university, a vocational rehabilitation agency, and so on. The possibilities vary from place to place, but a well-established funding agency with an interest in the radio reading service is critical in establishing and continuating the service. With a basic budget to depend on, grants to provide for special projects and programming can fill additional needs. (If, however, a granting program is the sole support of the service, questions arise concerning the continuation of what will have become a valuable service to those who depend on it, once the grant runs out.) The parent agency or organization ideally will share your goals, provide basic funding, furnish whatever other help is necessary, and let you provide your own service, developing it in the way that best meets the needs of your listeners.

When it comes to fund raising or influencing legislation and assisting your administrative agency, the general advisory committee is the nucleus to depend on. Committee members are the political trouble shooters and the people who can raise a matching grant, along with the parent agency. The group ideally should include newspaper publishers, representatives of local service clubs, elected political officials, radio and TV ownership, the Chamber of Commerce president, local industry, etc.

Administering the Radio Reading Service

The administering agency is a critical factor in the success of a Radio Reading Service. If this group is an independent, non-profit corporation, it must spend much time deciding the essential funding level, goals of the program, groups to be served, and the type of director the service needs. Good people in the past have been hired and fired because a board of directors was not willing to let a director direct. By the same token, the director should be sensitive to a fund raising group that rightfully expects to be fully informed of the program's workings. Total candor before commitment is essential on both sides.

If the administering group is a state agency, there will be a built-in advantage in having at least a basic operating budget and the established reputation of that group to back a fledgling Radio Reading Service.

We feel a state university or a college is particularly well-suited for this role. The direction of most educational institutions is three-pronged: academics, research, and service. The possibility of improving the quality of life for the blind, the physically handicapped and the elderly fits neatly into the school's service category. Further, a program that provides a broad range of services to many different groups, such as eligible print-handicapped people, is possible under the direction and sponsorship of a university. In the words of the Chancellor of the University of Kansas, Archie Dykes, "The Audio-Reader Service is an important part of the University of Kansas Outreach effort to serve all of the people of our State."

The University of Kansas provides its Audio-Reader Service with housing, utilities, a basic operating budget, students (who may participate for university credit), grantsmanship expertise and an outstanding main channel that carries the signal. Audio-Reader was the first radio reading service to be housed on a university campus and we feel it is one of the best possible options.

Feedback from Listeners

Our programming advisory committee is composed of the listeners. It should be formed as soon as possible after the service takes the air and should contain a good cross section of the listeners.

Our committee consists of 50 people who volunteered via the annual survey we conduct of our listeners. We call them each month to ask certain specific questions. The answers provide new programming ideas. We ask on the air for comments on a regular basis, so input is not limited to this group.

Facilities and Staff

After you have ascertained the needs of your area and organized your supportive general advisory committee, found a subcarrier to use and an agency to take fiscal responsibility, you are then ready to find space, hire staff, buy the necessary equipment and recruit volunteers.

Space should be adequate but need not be lavish. We house seven full-time staff, two half-time people, a guide dog, nine announcers, and anywhere from 75 to 100 volunteers in 955 square feet of space. We also have the use of the basement for storage.

A small reception area is nice, but office space (which may be shared), recording studios (which can be very small and must be sound treated), an on-the-air studio and a control room are necessities. Ideally, you should have additional space to audition tapes, store, pack and mail receivers, a production and interview studio for special local production, tape library space, and somewhere to meet with the volunteers, students and visitors.

Your space could be anywhere, but when decision time comes, think of accessibility for the handicapped, for older volunteers and students, adequate parking, and neighborhood noise. (Unless the insulation qualities of your building are excellent, or you are prepared to soundproof the whole area, look for a quiet spot.) If you pay your own rent, you will decide on the basis of your pocketbook.

Next comes the hiring of staff. The number of people you can hire will naturally depend on space and budget. Critical to your operation is a director who cares deeply about your goals, knows how to implement them, likes working with people and will work twice the hours you can pay to get the job done. Of equal importance is a technical director or chief engineer who can install equipment, do preventive maintenance and advise on the purchase of appropriate equipment. We would advise you to buy the best equipment you can afford.

From personal experience, we most earnestly recommend that professional broadcasters be hired for the director and technical director positions. Whether or not the FCC considers us broadcasters, that is exactly what we are. We broadcast an all-talk format, which presents challenges that many commercial and public broadcasters never have to meet. Professional broadcasters can contribute the skills and techniques that keep listeners from becoming bored, as well as the knowledge of format and programming that can be a significant factor in the "listenability" of a Radio Reading Service.

The third person to hire should be an office manager to keep books, records, volunteer schedules, and do the typing. A program director and/or operations manager to oversee the announcing staff and assure the smooth flow of volunteers, students and other personnel, is very helpful. We also have a blind student who auditions all tapes to assure their quality and calls our Program Advisory Committee each month to get their programming suggestions and feedback. We have a field engineer and a rehabilitation program director as a part of our vocational rehabilitation grant. Add a 10-hour-a-week development director (who actually works more like 35 hours per week), a secretary-receptionist, and a traffic person who does the program logs, publishes the monthly program guides and helps with receiver records, and you have a picture of the Audio-Reader staff. (See figure 1.)

The essential staff members for a new service are the director, chief engineer and the office manager, plus the necessary announcers. This staff will get and keep you on the air, if you have a willing group of well-trained volunteers. (Audio-Reader operated for a long time with a director, an assistant director/engineer, and a few students on work-study grants who served as announcers and handled the typing.)

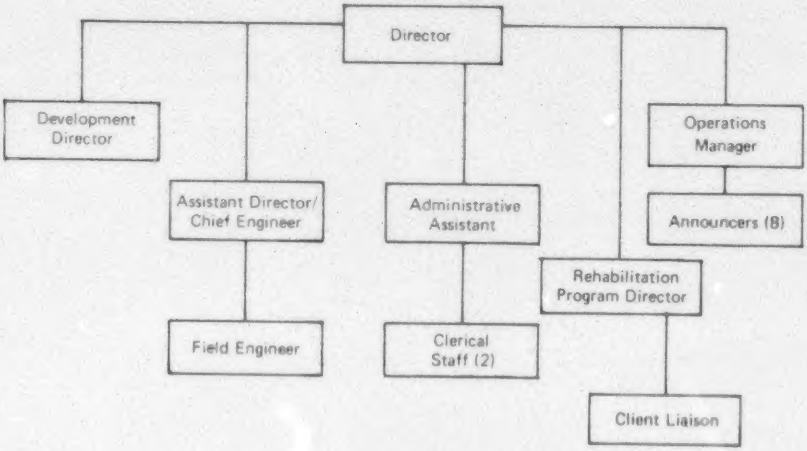

Figure 1. Staff of the University of Kansas Audio-Reader Service.

Programming

The purpose of a radio reading service is to give print handicapped people access to printed information that is not generally available to them. The most popular program any radio reading service provides is the reading of the daily newspapers. Access to this information creates opportunities for greater social interaction as well as greater personal independence. We offer the most recent best selling books, current magazines, and feature programming that includes weekly grocery shopping information, as well as practical suggestions in the form of vocational rehabilitation information. Audio-Reader provides a monthly program guide for its listeners in large print or in braille.

Technical Considerations & Costs

The equipment necessary to start a Radio Reading Service might include that described below.

The FM transmitter has three main sections: the exiter, the driver and the final power amplifier. The subcarrier generator is the most important part of the system. It is a small part of the exiter which multiplexes or modulates the Radio Reading Service on the air; it must be compatible with the exiter. If your local FM radio station does not already have this important part, the generator might be purchased as an option to the existing exiter.

If you are planning a new FM station or Radio Reading Service and will be purchasing a new exiter with the generator, specify 6 kHz deviation for the generator. This will enhance your signal by providing extra loudness in the fringes of your listening area. The injection level should be adjustable on the exiter and should be at 10 percent of the total modulation of the main channel, assuming a stereo operation. The price on this will be in the neighborhood of $1,000 to $1,500 for the generator and $4,000 to $7,000 for the entire exiter package.

For legal installation, compression and limiting equipment will be needed to achieve the highest possible loudness without over-modulation. A subcarrier modulation monitor will need to be purchased to measure "on air" modulation, injection and frequency deviation. The cost of this equipment varies with the manufacturer, but should fall in the range of $3,000 to $5,000. In some cases, the FM main channel may already have this equipment on hand, if they have been previously using their subcarrier for other purposes—background music, meter telemetry, and so on.

Distribution amplifiers may be needed at the studio location, if you are planning a large studio installation with many inputs and outputs. Patching facilities would also be needed in that case. If you are at a remote site from the main channel FM station, you probably will have to use a telephone audio loop to feed the main channel station with the program material. Whether or not a program amplifier would be needed in this situation would depend on your individual service. It is advisable to consult with the main channel engineers on these items. Prices for amplifiers, etc., might range from $1,000 to $3,000.

Miscellaneous items could include tools, wire, switches, lamps, AC hardware, meters, and so forth. These items are costly and take a long time to be delivered—plan ahead. Costs on these essential parts will vary, but you can count on $1,000 to $3,000.

The audio console purchase will depend on your budget, but you should take into account how many audio sources you will have to mix on the air. How many mikes? How many lines? There is a wide variety of items from which to choose. Again, the main channel engineers can give helpful advice. Buy the console to suit your needs from a reputable company, preferably with a guarantee to cover repairs. Some of the newer consoles are modular, so that the working circuit cards may be removed and returned to the factory for repair. Costs range from $1,000 to $30,000.

If you are planning to incorporate music into the programming, you will need to purchase one or two turntables and associated tone arms, magnetic cartridges and preamplifiers for both the "air studio" and the "production studio." Good turntables for broadcasting can be cued faster and easier than the home entertainment machines. Consult the trade publications for these and other items.

How many microphones will you need? Determine how many readers you will have at any one time. For example, an interview or newspaper studio might require two to four microphones; the recording studios for books need one for each room. Costs range from $50 to $200 per microphone, except for condenser mikes, which cost from $400 to $500.

To determine how many tape recorders you need, first decide how many recording rooms you wish to have. One tape recorder is required for each room. For the actual "air studio" we would recommend three or more machines to add the most flexibility. A minimum of two is necessary to permit smooth program transition. If you produce your own feature programs, you need a production studio, which requires at least three additional machines. Buy the best you can afford. Prices range from $1,000 to $3,500. Avoid home entertainment equipment, since it is not designed to withstand long, continuous use.

Broadcast tape cartridge machines are not mandatory but will enhance between-program capability. Prices range from $400 to $700. Cassette equipment provides flexibility in gathering information from the field. They are compatible with equipment of the Library of Congress and some other Radio Reading Services. Prices range from $75 to $300 per monaural unit.

Who Is Listening?

Audio-Reader currently has 1,200 individual SCA (subsidiary communications authorization) receivers distributed. The breakdown by the age of our listeners is as follows:

Age	*No. of Listeners*
0-19	6
20-39	12
40-59	50
60-92	1,132

The average educational level reached by our listeners is high school graduation.

There are also several central hospital installations where patients can listen throughout the hospital on ceiling or pillow speakers, or on unused TV channels within the hospitals' cable TV installation. There are presently seven hospitals with 2,660 patients who have access to the Audio-Reader program in this way.

Other patients in 57 nursing homes are being served. Most of the nursing homes have established special listening areas so that many listen together to daily newspapers, a favorite book, or special programming. These nursing homes house from 30 to 200 patients each. Those who are not ambulatory and want individual receivers are sent one for personal use. We know of only one senior citizens center with an Audio-Reader listening room, but other such installations are planned. An additional 1,000 individual receivers will be distributed this year, and many more hospitals and nursing home installations are planned as we expand our listening area.

Recruiting & Training Volunteers

Before embarking on the task of recruiting volunteers–a most critical aspect of a Radio Reading Service–several factors need to be considered.

- Who are your listeners?
- What is their average age?
- What educational and cultural interests will you need to cover?
- Are you programming for an urban or a rural population, or both?

A survey sent to prospective listeners will provide this information. Once these factors are determined and you know for whom you are programming, you will know what kinds of volunteers can best meet the needs and expectations of your listeners. Possibilities for providing volunteers might be found in community resource organizations such as those that coordinate community volunteer activity (a volunteer clearing house), service clubs, church groups, the League of Women Voters, and the American Association of University Women. If a college or university is part of your community, faculty members and spouses, students, and retired staff and teachers offer excellent recruitment possibilities. Do not overlook valuable help available from the retired members of your community. Members of the American Association of Retired Persons (AARP) and the Retired Teachers Association are often good readers, and they have the time to help you. In beginning your drive for volunteers, do enlist the help and support of the local media. If the newspapers and local radio and television stations publicize your efforts, many people will seek you out to offer their help.

How do you screen prospective volunteers? Two people on our staff handle screening–the operations manager and the director. After a brief visit just to put the guest at ease, the prospective volunteer is given a list of 100 words to read aloud. Fewer than ten mistakes means we have a potential newspaper reader.

If the vocabulary test is passed, we then have applicants read a newspaper article and a brief passage from a book to give us an idea of their style and where they will best fit into our format. We make a big effort to fit readers to their favorite areas of interest.

Turning down volunteers requires tact. We usually tell them of other areas in which we need help and suggest other activities, such as helping in the tape library or visiting nursing homes. What if a poor reader has already been accepted or if a formerly good reader's performance can no longer be tolerated? There are no easy answers to this question. Occasionally a volunteer can be shifted sideways or steered towards a different kind of reading material. Others can be given help to improve their reading.

Reading for Credit

Another source of volunteers for those of us on a university campus are students who want to earn credit. At the University of Kansas, students in some journalism and speech courses may enroll for one or two hours of credit (three hours a week for one credit-hour and five hours a week for two credit-hours). As the students have no papers to write and no exams to take, we are very tough. They must produce many hours of material, and it must be excellent. Each hour missed is subtracted from the final grade. Students who miss seven hours earn an Incomplete and must start from scratch the next semester. If they do not make it the second time, they earn an F. We have acquired some of our most dedicated volunteers from among these students, many of whom return semester after semester as volunteers after they have earned their maximum five hours.

Other Volunteers

Children occasionally record for us to add variety to our sound. Their voices are lighter and offer good contrast. One nine-year-old has just completed a series titled Career Opportunities Unlimited, for which he interviewed all sorts of people to discover what their jobs entailed and to see if handicapped people had the opportunity to do the same work.

When putting together the program logs and the monthly schedule and program guide, male and female, light and heavy voices are mixed to give as much variety to the sound as possible. We are not looking for professional performance—just friendly people who can project their interest in others and who have clear, easily understood voices.

Without these wonderful people, the most exotic decor, equipment and physical plant are worthless. The best advice we can offer is to recruit with enthusiasm, screen and train with care, and be certain to communicate your appreciation to this most vital aspect of your radio reading service.

National Organizations

In 1975 the First Annual Convention of Radio Reading Services was held in Oklahoma City under the sponsorship of the American Foundation for the Blind. Many representatives of various national groups interested in this new concept in electronic media were present. Such groups as the National Federation of the Blind, the American Council for the Blind, Radio Station Management, the Library of Congress, the Corporation for Public Broadcasting and the radio reading services themselves were represented.

The Corporation for Public Broadcasting has arranged with National Public Radio to initiate a pilot project specifically for radio reading services. The project will include ten hour-long programs in a magazine format with topics that pertain directly to the needs of radio reading service listeners.

The American Foundation for the Blind continues its interest in Radio Reading Services with support of convention efforts and Regional Seminars using their own national experts and resource people from The Association of Radio Reading Services.

Conclusion

The establishment of a successful Radio Reading Service—one that combines the elements of responsiveness to listener needs, that permits volunteers the satisfaction of time spent in a fulfilling way, offers community and state leaders a meaningful outlet for their influence and generosity—can be accomplished if the basic elements are patiently brought together. The step-by-step organizational structure is critical to providing a strong, ever-growing Radio Reading Service that offers listeners greater personal independence.

Rosanna Locke Hurwitz is director of the Audio-Reader Service at the University of Kansas. With a B.S. in special education, speech and hearing, she has served as a speech therapist in two public school systems. Before joining the Audio-Reader staff in 1974, she was community affairs director for KLWN Radio in Kansas. She was elected to the executive committee of the National Association of Radio Reading Services in March 1977.

Thomas F. Fish is assistant director and chief engineer of the Audio-Reader Service. While majoring in radio and television film at the University of Kansas, he worked for the University's KANU-FM. He joined the Audio-Reader staff in 1974.

Radio Reading Service: The Minnesota Experience

C. Stanley Potter
Minnesota State Services
for the
Blind and Visually Handicapped

In the mid-1950s, the Minnesota State Services for the Blind established its Communication Center. It grew out of needs expressed by blind people, their counselors and their teachers. While library services in braille and on recorded talking books had been available in the United States through the Library of Congress and Regional Libraries, the only material that dealt with current happenings in the state was *The Minnesotan*, a monthly braille magazine. Its circulation was limited to about 300, since the demand for braille materials was declining. The decline resulted from the rising proportion of blind people who had lost their sight as adults, of whom fewer use braille for reading. The first purpose of the Center was to put material of local and current interest from *The Minnesotan* into recorded form to be circulated biweekly for auditory reading, in order to reach many more people.

Also in the mid-1950s, blind and visually handicapped children were in ever increasing number remaining in their home school districts and being educated with their seeing peers, rather than in state schools for the blind. This meant that textbooks in almost infinite variety had to be transcribed from print into braille and on tape. Individual students needed the books selected by local officials for the education of all children in their districts. Textbooks are published in such variety that many of the books transcribed are used by only one child or college or vocational school student. Others, over a period of time, are used by many.

The second purpose of the center was to provide all students with all the books they require for their studies, in a form that enables them to read them on their own, and that is available through a single center resource. Carefully selected, well-trained volunteers with a variety of talents and backgrounds, who could sight-read fluently and accurately, have enabled us to provide on demand a high volume of such diverse materials.

Unserved Needs

While that was a good start in approaching our communication requirements, it soon became apparent that other cultural and social changes were affecting the blind and physically handicapped and their communication needs:

1) More and more blind people were finding employment in industry, in the professions, in the service occupations, and in business.
2) More and more handicapped homemakers were using rehabilitation services to develop compensatory skills in mobility, personal self-care and in the care of their family. With their new independence, they were becoming more active in women's organizations, church groups and local political interest groups.
3) Fewer and fewer of the increasing number of elderly blind people were living with their children. More of them were receiving rehabilitation services that permitted them to maintain themselves in their own homes. Many of those with other illnesses were living in rest homes.

In summary, the younger blind people were living and working with people who saw and read and talked about what they read. Many of the older people, whether at home or in an institution, had lived their lives as seeing persons with newspapers and other printed material about them, until they lost their sight. Both groups were denied access to the world of immediacy that they needed to exploit the emerging opportunities for acceptance and social intercourse.

Library materials in recorded form are a great asset to many, but they are no substitute for the "localism" that a newspaper brings, nor do they bring current best selling books while these are still fresh. It takes several months to select and have books transcribed and placed in regional libraries and, as with any library service, the number of copies is limited. A person may wait for months to borrow a requested book. (I will never forget the blind woman who said to me, "By the time I can get a best seller, the ladies in the beauty shop have quit talking about it for six months.")

The Search for a Solution—Why SCA?

We were faced with a problem: a substantial group of *visually and physically atypical* people were rapidly becoming *socially and vocationally typical* participants in society, but lacked the current and local information available to the people around them. For a long time, radio seemed the obvious answer, but in what form? On what frequencies? At what cost? After examining these questions, it appeared that a good answer, and perhaps the best one, might be found in the subsidiary carriers of existing FM stations. They offered several advantages:

1) In the crowded spectrum, requests for additional frequencies would be unnecessary.
2) The cost would be within reach, since the expensive transmitters, towers and antennas were already present for another purpose. The remaining expenses of any broadcaster – studios, program production equipment, automatic level controls, personnel and SCA rental – seem manageable.

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*Subsidiary Carrier Authorization. Any FM transmitter can broadcast several programs simultaneously, provided the necessary encoding circuiting is use. The desired program can then be separated from the other decoding circuitry, if it is present in the receiver being used. Stereo broadcasting of this capability and a third channel is very feasible, usually at 67 kHz above the main channel.

3) At 100 megaherz, signals are stable day and night, affected little by changes in the ionosphere, which alters reception patterns on the lower frequencies. These frequencies are not limited as severely by terrain as are the much higher frequencies.

Yet what could one-tenth of the power of even a full-power FM station do in a state that spans 300 by 400 miles? What performance standards could be obtained technically in SCA receivers and at what cost?

To answer these questions, in 1967 we began to investigate. We found that SCA technology in receiver design and transmission standards had not been given a great deal of attention, but we were able to determine that one could expect good SCA performance for distances from a transmitter equivalent to the reception of stereo, which – depending on main channel power, terrain, antenna height, full legal SCA injection and effective automatic level control – was 50 to 60 miles. If an outdoor directional antenna cut for the transmitter frequency was used to replace the customary receiver whip, somewhat greater distances were attainable.

Since that time, receiver design has substantially improved. The improvements do not extend reception capability much, but provide vast improvement in the quality of the SCA signal, greater freedom from crosstalk, and – with some manipulation of the audio frequency curve – better and more pleasant readability.

The Radio Talking Book Network

The Minnesota Radio Talking Book Network began its transmission on January 2, 1969. In those early years, broadcasters in many parts of the country were concerned about the use of SCA, because of what was known as the "birdie," a variable whistling sound that could be heard when listening to a main channel with SCA operative. The birdie turned out to be a receiver phenomenon that disappeared with the introduction of the phase locked-loop circuitry now common in FM receiver design.

The Minnesota Radio Talking Book now uses a network of ten transmitters and transmits reading matter, mostly very current, nineteen-and-a-half hours a day, 365 days a year. Its audience is made of 4,000 individuals to whom receivers have been loaned, and the residents of several institutions with high populations of handicapped and aging persons. Institutional systems consist of an SCA receiver feeding one channel of an audio distribution system, which the hospital or other institution may already have available, or the receiver may be a carrier current type of retransmitter, so that the signal is available throughout the facility in the rooms of residents or patients.

The type of receiver used in individual homes is crystal-controlled, has a single combination power switch and volume control and, in addition to its internal speaker, a low impedence output jack for the headphone supplied. This jack doubles as the output for feeding a tape recorder or other audio device.

For those extremely handicapped by paralysis or other disorders, an easily installed touch-sensitive remote switch is supplied by the agency. This permits listeners to turn the receiver on and off if they can move any part of their body even slightly.

In our own lab, we build a small carrier current transmitter, the output of which is in the order of 200 milliwatts. This unit is installed inside the cabinetry of receivers to be loaned to those who are active in their homes and need to be able to read in any room. A small handheld battery-powered receiver is supplied, however, which is fixed to the frequency of the retransmitter.

Why "Radio Talking Book"?

"Talking Book" is a term with which the public is widely familiar. Radio's purpose is not to replace the phonograph talking book, nor the more recent tape talking books. Its purpose is to add a new dimension to auditory reading: it is immediate and has the capacity to be local. It should not be considered a substitute for library services in which a person can choose what to read and when to read it. Like all other immediate media – newspapers, radio, and television – it must be programmed, and the programmers must devise systems that will provide for broad input from listeners and will be guided by their reactions.

Summary: The Advantages of SCA

We have found the SCA system of providing a radio talking book service (or whatever you wish to call it if you are doing similar programming) an appropriate and highly desirable medium. It is perhaps the only feasible method of doing what we want to do, for the following reasons:

1) It is the only cost-effective system for providing full-time service (in Minnesota, 19½ hours a day). To us, full-time service is important, since we want to include a broad cross section of the materials being read by the public. We want to meet the needs of people with a wide variety of interests. We want to provide materials usable by people with various levels of comprehension, and we want time to provide programming for those with shorter attention spans, such as some of our institutionalized and older listeners.
2) The SCA is regarded by the FCC as a private means of communication. We have a stable, gradually increasing audience that has come to understand why we include books that many people like, but that others find offensive. (If our signal were available to a continually variable public audience, we would be under frequent criticism from people who do *not* understand.) Our readers do tell us what they think, and sometimes in no uncertain terms. I quote two reactions to the same book:

> Who selects . . . the filthy books . . . such as the 8 p.m. book (*Fear and Loathing: On the Campaign Trail'72*). You are beating the commercial stations – filth – maybe it will bring you notoriety. As ye sow so shall ye reap. You have many good things on.
>
> . . . All of the volunteers are pretty wonderful. I especially like Eunice Grier and I enjoyed Lawrence Becklund reading *Fear and Loathing: On the Campaign Trail'72*.

While much of what we read would not be considered offensive by anyone, we do read material that many people might read comfortably in private, but that few would read aloud to another. Many feminine listeners have told us that from our "Strictly Feminine" program they have learned a great deal about everything from hair-dos to clothing styles to sex. About the latter, they gained information they had no idea women around them were reading, and that no one had read them or talked to them freely about.

What about the magazines and books that are printed specifically for the purpose of stimulating vicarious sexual experiences? People who can see are free to find such stimulation in many ways, from reading to just plain girl (or boy) watching. We can include such materials in closed circuit broadcasting, and the earphone provides privacy in reading whatever one chooses to hear.

3) The third virtue of the SCA system is that it permits us to read copyrighted materials without requesting permission, which must be the case if the material is to be fresh. We are careful about eligibility: only those who cannot effectively read printed materials, because of visual or physical handicaps, are listeners. They are people who would not buy a publisher's book or magazine, because in its printed form they cannot use it.

Radio Reading Services are gradually growing in various parts of the nation. Some of them are operated by broadcasters as an additional service to the handicapped population. More are operated by agencies for the blind, public or private, or by organizations established for the specific purpose of developing and operating a Radio Reading Service. Except for the broadcasters who provide the service themselves, most organizations are leasing the SCA capability. Some systems serve a single urban area. Others, through networking, serve a whole state. There is no doubt that radio reading is rapidly becoming a highly important influence in the lives of handicapped people.

There are now approximately 50 Radio Reading Services using the SCA medium in the U.S. and Canada, plus about 25 planning sites. The Association of Radio Reading Services was formed at a national conference in 1977. The Association is concerned with legislation and giving its members technical, organizational, program and fiscal development advice, as well as with the publication of other relevant information. Further information may be obtained by writing the author.

C. Stanley Potter is an educational psychologist who has been director of the State Service for the Blind in Minnesota since 1948. He has had extensive experience in psychological counseling and has served on the committees of several states and national groups involved in vocational rehabilitation into the integration of school-age blind children through applying special education materials and techniques. Mr. Potter, who holds the M.A. in education, is president of the National Association of Radio Reading Services.

He may be reached at: State Services for the Blind and Visually Handicapped, 1745 University Ave., St. Paul, Minn. 55104.

DOCUMENTATION TWO

Page Recommendations for the Recruitment of SCS Volunteers

Suggestions for the Recruitment of SCS Volunteers

by

David W. Page

April, 1978

INTRODUCTION

> "The imponderable gift of service is an essential part of the American culture...it is the core of idealism which must be preserved if we are not to be dehumanized and voluntarism is not to go altogether. The opportunity to give of one's self is essential to the life of the individuals as well as of the community." --Harriet Naylor

Special Communication Services (SCS) has the capacity to provide local volunteers with an exciting opportunity to serve their community in a unique and meaningful way. It is important that those reponsible for recruiting SCS volunteers maintain this positive attitude in all recruitment efforts. Additionally, however, a plan should exist that specifically identifies:

--Needs of the SCS Program (Goals and Objectives)
--Potential volunteer job designs
--Year-round recruitment needs
--Coordinated methodology.

To assist with the development of such a plan, the following report will present various recruitment methods, campaign organizational alternatives, publicity strategies, and potential sources of volunteers. It is not intended to be an exhaustive treatise, but rather a collection of recruitment concepts that have been tested in the Greater Williamsburg Area. Proper implementation of suitable concepts within a structured recruitment plan will provide Special Communication Services with a sufficient number of well motivated, committed volunteers.

David W. Page

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Method #1

THE "STANDARDIZED PRESENTATION"

A "standardized presentation" on Special Communication Services refers to any presentation that outlines the conceptual base of SCS. Such a presentation would generally be organized around the need for SCS, the rationale for its implementation, and creating/sustaining a general understanding of the concept. Because this type of presentation would focus upon SCS as a theory rather than a basis for action, it is not an effective means of recruiting volunteers. One recruiter, for example, spent two months giving numerous presentations to citizen groups, students, and agency personnel. The result of his effort was that he involved one person in his program.

This is not to say that "a standardized presentation", in which a series of overhead transparencies or other visual aides are utilized, is an ineffective way of informing people about Special Communication Services Quite the contrary! The standardized presentation would serve to acquaint members of a community with many of the comprehensive and systematized components of the SCS scheme. It can be used effectively to draw potential volunteer leaders into the movement, or further educate those committed to implementing the SCS program.

Method #2

THE "HIGHLY SPECIFIC PRESENTATION"

A "highly specific presentation" would define the needs of the Special Communication Services and the types of volunteers required to meet those needs. It would zero in on several examples of handicapped persons to be served by SCS, and how the volunteer would be able to help these people. In this type of presentation there is no need to fictionalize situations that surround handicapped people because the main object is to clarify to potential volunteers in the audience the nature and extent of the handicapped person's need and the way in which that need can be met by a volunteer.

A specific presentation should be given to a selected audience. For example, when speaking to "The Friends of the Library" (an actual organization located in the Williamsburg area) it would be wise to discuss potential use of library resources to enrich the SCS program. Obviously, a presentation given to a 12th grade "Social Justice Class" should be different from that given to a women's auxillary of the American Legion.

Therefore, a "highly specific presentation" must always be thought out in advance, particularized to the situation(s) of the handicapped persons being served, and given to a selected audience.

There is no doubt that this method of recruitment supercedes the success of the standardized presentation because it makes an appeal for volunteers in a very individual way. Presented in theory, The Special Communication Services is a challenge to a person's logic and sensibilities, but presented in concrete and real terms, it is a challenge to a person's belief in action and social change.

Method #3

"ONE-SHOT MEDIA COVERAGE"

One-shot media coverage (newspaper, radio, T.V.) means signular press releases, use of talk shows, etc., as opposed to a series of articles or ongoing advertising. Almost all volunteer programs utilize this method of recruiting at one time or another. For example, it is common to see program directors, volunteers and other staff personnel on T.V. talk shows such as "Mike and Lynn" or "Dick Lamb".

Whether a program will utilize the media periodically or as part of a campaign to expose the general public to its recruitment needs requires a decision by the program staff. Such a decision, it should be recognized, implies that the program is at the level of development where it can easily maintain a "public profile". To present the need for SCS volunteers to the general public requires that: 1) the SCS office is prepared to screen potential volunteers; 2) the SCS staff and office be functioning at an efficient level; 3) every member of the staff agree on what Special Communication Services is, and moreover, how it should be represented to others.

There have been cases where staff and volunteer leaders, anxious to recruit through the media, do so before they have even decided on their "purpose for being"! Of course, what results is mixed messages: One staff person says one thing to a news reporter and a board member says the opposite to a radio interviewer!

In my experience, most "one-shot" efforts to recruit volunteers have not succeeded, because they are made only once, are usually unplanned, and are not usually timely. Furthermore, such presentations, when prepared and delivered randomly, do not attract volunteers in the quantity that would be expected considering the amount of energy and money that goes into the development of such materials. The argument being made is not against the use of the media or other materials to recruit, but that there should exist an awareness among implementers of recruitment schemes that, compared to an organized recruitment campaign which utilizes the media and selected recruitment materials, singular (or one-shot) efforts to recruit volunteers through the media are usually ineffective.

Method #4

ALL-OUT MEDIA CAMPAIGN

An "all-out" media campaign is the result of a decision made by the Special Communication Services staff to extend both the program goals and needs to the public. And, as said before, the staff must agree on what SCS actually is.

Initially, a specific goal must be set by the SCS staff: e.g., "Ninety-eight volunteers and three team supervisors will be recruited during a three-week area-wide recruitment campaign." Once such a goal is specified, a sub-committee should be organized to plan the campaign. It would be wise and expedient to involve only those persons on the committee who either possess an abundance of energy, or have acquaintances and contacts in the areas of campaigning, public relations, advertising, media or sales.

The first step in acquiring persons for such a sub-committee might be for the SCS staff to hold a brainstorming session to think of all potential people that could plan an effective campaign. The following list of people are examples of persons that might be recruited to be involved in designing a recruitment campaign.

DESIRABLE MEMBERS OF A RECRUITMENT CAMPAIGN COMMITTEE ARE PERSONS WITH EXPERIENCE IN:

1. launching major recruitment drives to recruit volunteers;
2. organizing or conducting local political campaigns;
3. recruiting personnel for industry, business or human service;
4. recruiting volunteers for international programs (e.g., VISTA, Red Cross, etc.);
5. speaking in public; and

6. rallying professional and technical support.

You do not need experts in publicity and media on your committee as much as you need someone who can effectively recruit the necessary professionals when they are needed. For example, you may decide that the creation of a video tape showing a male volunteer performing typical SCS duties would be an effective tool in recruiting needed male volunteers. It would be important to have a committee member who can do the leg work to find audio-visual technicians for this one project.

Method #5

WORKSHOPS AND PUBLIC MEETINGS

Workshops and public meetings are excellent ways in which to involve volunteer leaders in the development of the Special Communication Services program. However, they are not known to be effective for recruiting volunteers. The reason for this is that the express purpose of a workshop or public meeting is usually to teach or inform people about the principles and organizational issues relevant to a particular program. A volunteer is not, for the most part interested in those aspects of an organization. Therefore, unless a special workshop is organized for prospective volunteers where presentations are given solely on "the role of the SCS volunteer", it should not be expected that persons will become motivated to take on volunteer responsibilities on the basis of being exposed to a concept on organizational dynamics.

Method #6

HIGH INVOLVEMENT OPPORTUNITY

Obviously, not all volunteers share the same motivation for becoming involved with handicapped persons. In fact, there are many reasons why people become interested in the rights and interests of others. Some people, for example, are extremely challenged by situations which require a high degree of commitment from them personally. Because we live in a society that is, in the eyes of many, apathetic and alienating, some people are responding by involving themselves in activities which demand their personal involvement. SCS recruiters would do well to identify persons who possess such strong convictions.

For example, there are (contrary to popular opinion) some people who would respond to taking on a long-term or formal commitment to the SCS program, but would not take on a role that was less demanding. Similarly, there are members of groups who would like to become deeply involved with a community project instead of just putting up the money required to initiate or support it. As an example, in Berkeley, California, the YMCA's, Y's Men's Club, has made financial contributions to the Citizen Advocacy Program, but moreover, has met, through it's membership, many of the instrumental needs of handicapped persons.

In Williamsburg, there are several organizations with the potential for sponsoring as a primary project the recruitment and maintenance of a volunteer corps for SCS (e.g., Handicaps Unlimited, Friends of the Library, Help Unlimited, etc.). The important thing to remember about this method of recruiting volunteers is that you have to know who you are looking for, whether it be an individual or an entire "club" or "association". Of course, not all people nor all clubs would care to be involved in such a way, but some will. The key is to identify people and groups who are in need of a highly involving opportunity and to challenge them!

Method #7

SPECIAL EVENTS OR PROJECTS

Telethons:

The American Red Cross in the San Francisco Bay Region had considerable success recruiting both funds and volunteers for their programs by participating in a telethon. The problem with a telethon in the Tidewater Area, aside from the enormous amount of time and organization necessary, is that available television stations broadcast to places far outside of the target area (e.g.Norfolk, Richmond, etc.).

Another chief consideration that must be given to this type of recruitment is whether the "image" of SCS would be damaged by participating in a program that traditionally is associated in some communities with charity and pity.

In making a decision to participate in a telethon, the SCS staff must consider:

1) What safeguards can be built in to avoid the exploitation of handicapped people? (e.g. Are handicapped people displayed and paraded before the viewing audience, by those producing the program, without any cognizance of their rights to dignity and privacy.)
2) What insurance is there that SCS will not be perceived by the viewing audience as simply another volunteer program?

Tour/Demonstration of the SCS Facilities:

An organized tour and demonstration of SCS/Centex facilities would be an effective means of generating enthusiasm for and involvement with the SCS program. Ordinary citizens who have previously had little contact with communication systems or handicapped persons may need to have this type of exposure prior to assuming his/her volunteer duties within SCS. Conceivably, community service organizations, school groups, etc. could also benefit from a special tour whose "expressed purpose" was to inform them about the operation of the SCS/Centex programs. It is doubtful, however, that large numbers of volunteers could effectively be recruited by this method.

Method #8

AGENCY REFERRAL

Potentially, any agency which develops and recruits volunteer manpower for a community is a source of people for the Special Communication Services. In the Great Williamsburg Area such agencies include:

--Help Unlimited (College of William and Mary)

--Mental Health/Mental Retardation Volunteer Bureau

--ACTION

Not all agencies that recruit and channel volunteers into various settings share the same philosophy. Some prefer to focus upon traditional kinds of volunteerism (e.g. MH/MR Volunteer Bureau and ACTION) and others upon more active forms of participation associated with social change (e.g. Help Unlimited). Special Communication Services will need to seek the support of these agencies and remain in frequent contact to inform them about current SCS volunteer needs.

Method #9

IN-HOUSE RECRUITER

Almost all people are associated either formally or informally with a group. That group may be professional, social, religious or political. Potentially, then all people as members of groups are sources of information about those in their group that may make good SCS volunteers. For example, employees of large industrial, business and governmental organizations are often acquainted with large numbers of workers. Similarly, well-known community organizers who are affiliated with many organizations have access to potential SCS volunteers. Classroom teachers and personnel placement officers are other examples of persons firmly established in and surrounded by groups of people. Depending on program recruitment priorities, in-house recruiters might also be established in labor unions or foster parent, banker, professional women's associations, etc.

Part of every recruitment campaign would hopefully include the recruitment of recruiters just as it would the direct recruitment of volunteers.

Method #10

DELEGATED SCS VOLUNTEER RECRUITER

The delegated SCS volunteer recruiter may indeed be an "In-House Recruiter". An "SCS volunteer recruiter" differs, however, from an "in-house recruiter" by being specially selected and given responsibility to recruit a specified number of SCS volunteers over a specific time period. In other words, the SCS staff would enter into an agreement with such a person that would clearly outline expectations for the recruiter, despite the fact he is himself a volunteer. Obviously, only a highly energized and confident person would be interested in such a job, but this method of recruitment should not be excluded simply because that individual may be difficult to locate.

For the Great Williamsburg Area Citizen Advocacy Program the delegated volunteer recruiter scheme has worked very successfully. During a brainstorming session, potential target populations for volunteers and their special needs were identified:

1. College students
2. High school students
3. Senior citizens
4. Civic groups
5. Church groups
6. Siblings of retarded citizens

One delegated recruiter was assigned to each target population and requested to find three volunteers within that group. Further, they completed a report (see Appendix A) that identified:

- --A general description of recruitment activities
- --Publicity sources specific to target population
- --Names, addresses, phone numbers of persons helpful for future reference
- --A listing of volunteers recruited
- --Brief outline concerning the special need of target population (training, transportation, etc.)
- --Suggestions for the scheduling of events, staff support, etc.

Recruiters were not "thrown" into the field cold. Each was given a "lead sheet", compiled by the staff, that identified key people/resources within the target population. Further, Citizen Advocate volunteer recruiters remain on the staff throughout the year to advise as to the continuing needs of their target group and potential recruitment opportunities.

Method #11

INFORMANTS

Commonly referred to as "ordinary folks", persons who are situated "in the heart of the everyday world" are excellent sources of information about potential volunteers. Such people might include policemen, mailmen, bartenders, clergymen, public health nurses, store managers, gas station attendants, bus drivers, "Avon ladies", and older citizens (particularly those who have lived in the area for long periods of time).

Together, the SCS/Centex staff could probably construct a list of a hundred people they know, who, if given an understanding of SCS, might be willing to offer a few leads once in a while. "Informants" as opposed to recruiters, are likely to be less involved in the SCS program, but prepared nonetheless to make casual recommendations.

This method differs from "brainstorming" (the method that follows) in that it is intended to simply locate persons who may know of other persons who might be prospective SCS volunteers. Brainstorming is used to identify actual potential advocates.

Method #12

BRAINSTORMING

Brainstorming is a process whereby a group engages in spontaneously generating ideas or solutions to a problem. Typically, a group of people sit down together, define a subject or problem, and responsively state every thought or idea that comes to mind in relation to the subject or the problem. Criticism or evaluation of any of the stated ideas is prohibited, as it is only through free expression that a maximum number of ideas evolve.

Brainstorming can be an effective process by which the SCS staff may identify potential volunteers. It is recommended that the SCS staff does meet periodically for the sole purpose of brainstorming. For example, staff persons can bring to a committee a list of volunteer job descriptions, and the group would then "rack their brains" for the name of every conceivable acquaintance, friend, associate, neighbor, co-worker, or family member that might be able to meet the defined need. Such a process has proven extremely fruitful in identifying possible volunteers. At the end of a "brainstorming session" a list of identified potential volunteers would be given to the recruitment committee chairperson or a delegated recruiter for follow-up. Brainstorming is generally more productive than singling out staff members and asking them for names of persons who might make good volunteers. The reason for this is that many times when people are "put on the spot" they will limit or curtail their thinking. Therefore, to use the technique of brainstorming successfully, the following should be observed:

1. Accept and record all ideas/persons.
2. Do not comment on any ideas presented.
3. Make no judgments.
4. Accept repeated ideas/persons and do not draw attention to the fact of duplication.

Brainstorming is particularly effective when practiced freely and frequently. It is also a means whereby the SCS staff as a whole can become active in seeking needed volunteers, and a process that removes the responsibility for identification of volunteers from just one person.

Method #13

WORD-OF-MOUTH

Theoretically, the "Word-of-Mouth" method of recruiting volunteers is, perhaps, the most successful, but in practice the extent to which this method is successful depends very much on the overall quality of a program. Specifically, no SCS volunteer is likely to recruit other volunteers if he is himself dissatisfied in his role. Volunteers can be satisfied only if they are properly selected, orientated, trained, and supported throughout the program experience.

TABLE #1:

EFFECTIVENESS OF RECRUITMENT METHODS IN PROVIDING POTENTIAL VOLUNTEERS

	Method	Rating
1.	The "Standardized Presentation"	Poor
2.	The "Highly Specific Presentation"	Good
3.	"One-Shot Media Coverage"	Poor
4.	All Out Media Campaign	Fair/Good
5.	Workshops and Public Meetings	Poor
6.	High Involvement Opportunity	Fair/Good
7.	Special Events or Projects	Fair/Poor
8.	Agency Referral	Fair/Good
9.	In-House Recruiter	Good
10.	Delegated Volunteer Recruiter	Good++
11.	Informants	Good
12.	Brainstorming	Good+++
13.	Word-of-Mouth	Good

Section II

PUBLICITY STRATEGIES

Use of the Media in the Recruitment of Special Communication Services Volunteers

There are many different ways of using the media. In an organized campaign, several of the following uses of the public media would be required if the campaign is to have any far-reaching effects. However, it should be noted that the relative success of any "all-out-campaign" is dependent upon the ingenuity, energy and resourcefulness of members of the campaign staff and the appropriateness of the conceived campaign to the community.

1. Area Newspapers:

--*The Daily Press*
--*Times Herald*
--*Tidewater Review*
--*Virginia Gazette*
--*The Flat Hat* (William & Mary)
--*Amicus Curae* (William & Mary Law School)
--Numerous school and church newspaper/bulletins

Local or community newspapers can provide valuable support to the SCS recruitment campaign so long as the story carried by the newspaper is directed at recruiting specified volunteers with particular skills. It is not enough to submit a press release or story to a newspaper about the Special Communication Services program. What would generally result from such an effort is that people would become informed about the goals of SCS, rather than the individual needs of the handicapped persons it serves. It is also important to *always* include the name of the SCS program director and the phone number of the SCS office.

For feature articles in local newspapers, the following people have proven most helpful:

Leon Rubis, *The Daily Press*
Bill McLaughlin, *Times Herald*
Hope Reese, *The Virginia Gazette*

Utilization of church/school bulletins and "Letters to the Editor" (*Daily Press* and *Times Herald*) plus the "Public Pulse" (*Virginia Gazette*) has also proven effective (see Appendices B & C).

Classified advertisements, such as those found in Appendix D, are both effective and low in cost (approx. $32 for two weeks). Thirty-six people responded to a "help wanted" advertisement for Citizen Advocacy over a two-week period.

2. *Television*

As previously mentioned, local television stations reach a viewing audience that is far greater than the SCS volunteer target populations. However, it should be noted that free Public Service Announcements are fairly easy to arrange for and obtain. At this point, however, it would appear that because of the limited area served by SCS, it would not be advisable to begin massive television advertisement.

3. *Radio*

Like television, selecting a radio station for the purpose of recruiting volunteers means selecting a particular audience. If youth volunteers are deemed desirable, the "Top 40" station that reaches young people (e.g. WGH or WRAP) would be appropriate. Students and university staff, on the other hand, tend to listen to university-sponsored stations such as WCWM.

Frequently, commentators, disc jockeys and entertainers take on public service courses by getting involved with local projects. "Smiling Tony" of WMBG (Williamsburg), for instance, was heavily involved, personally, with "Toys-for-Tots" and has been most helpful with publicizing Citizen Advocacy.

4. Additional Materials

BROCHURES

Brochures are great, but they do not recruit volunteers by themselves! A brochure serves many purposes: 1) it can pique the curiosity and interest of a potential volunteer; 2) it can legitimize the program in the eyes of the community; and 3) it can educate the public as to program scope and objectives.

But without the complement of one of the recruiting methods listed in the previous section, a brochure serves no other objective than informing the potential volunteer about his possible involvement with a handicapped person. Traditionally, most everything that is written is designed to teach, inform, advise, describe, entertain or arouse, but seldom to solicit action. There is, however, one exception: a one-page Citizen Advocacy flyer (see Appendix E) was distributed door-to-door in dormatories at the College of William and Mary with some success (200 flyers yielded eight volunteers). Generally, however, volunteers will not become involved solely on the basis of a brochure, but rather by a more compelling invitation to participate in the life of a handicapped person.

NEWSLETTERS

A Special Communication Services newsletter, published once the program is well underway, can, of course, serve many purposes. By identifying current needs for volunteers, as an example, potential prospects might be identified.

To maintain proper interagency communications and morale, it is recommended that an SCS newsletter be published on a regular basis as soon as a sufficient number of volunteers are recruited.

FILMS, VIDEO TAPES AND SLIDES

Several volunteer programs in the area (Child Development Resources, MH/MR Volunteer Bureau, and Big Brothers) utilize films, video tapes or slide show presentations. But, again, such presentations have to be geared to a specific audience and describe the particular type of volunteer needed. This is difficult to accomplish as the words of an experienced Williamsburg area recruiter describes:

> "I worked hard to put together a slide presentation that would be a show stopper and excite people about volunteer activity in our program. With a few exceptions, it has not. It is not because the presentation is not well done; for the most part it is, but I just expected too much of it."

Again, a basic principle in recruiting people for anything is that the recruiter must be very specific in what he wants people to do.

Some Suggestions:

DO--

-Consider carefully the audience you wish to reach before preparing publicity materials and write or speak on the level they will best understand.

-Make personal contacts with churches, social clubs, civic groups, etc., through telephone calls or personalized letters, and consistently follow-up on these calls, keeping a record which indicates when the contact was made, how it was followed-up, and results obtained.*

-Make initial contacts with media persons yourself (names have been provided previously in this report); don't wait for them to come to you. Make certain to give news releases directly to the person who will be doing the story. This ensures that the release will not be shuffled from desk to desk until it reaches the right person.

-If a time element is involved in a story, be sure to indicate a deadline for running it at the top of the first page so that it won't be published too late to fulfill its purpose.

-Observe media deadlines:

Virginia Gazette: 5:00 p.m. Tuesday
Daily Press: 5:00 p.m. daily
Times Herald: 5:00 p.m. daily

---

*A list of local organizations with names, addresses and phone numbers of contact persons is found in Appendix F.

-Prepare and release materials well ahead of time to give readers plenty of time for planning and response.

-Have materials well organized before presenting them to media people. If reporters call you on the telephone, ask if you can call them back after writing down and researching questions asked.

-Remember it is possible to create news. Examples: build a Christmas Parade Float, have a dance, give special awards or invite a prominent local official to cut the ribbon for the opening of the SCS office.

DON'T--

-Be discouraged if you don't succeed all at once.

-Expect media people to come to you requesting information because most do not have time to go out looking for feature stories. You will get better coverage by feeding them a steady stream of information over a long period of time. Be consistent in publicity efforts--don't let them die down!

-Walk in and demand coverage. Better results are obtained when logical reasons for needing publicity is presented along with news releases.

PART III:

RECOMMENDATIONS FOR SPECIAL COMMUNICATION SERVICES RECRUITMENT CAMPAIGNS AND ORGANIZATIONAL ALTERNATIVES

Recommendation #1: Prior to any recruitment campaign, detailed volunteer job descriptions and staff organizational structure (e.g. see Appendix G) must be designed. Recruiting before designing jobs would be like trying to dance before the music begins. The possibility of ending up out of step is very good.

Recommendation #2: Decide on the total number of volunteers needed and then "phase" recruitment goals in realistic stages that correspond to the growth of the SCS program.

Recommendation #3: At least four regular recruitment/media campaigns should be conducted within the first year of SCS operation (e.g. spring, summer, fall, and new year) to maintain the level of volunteers needed at all times.

Recommendation #4: Locate and utilize a local organization who will take on SCS volunteer recruitment as a primary project. The Williamsburg Chapter of Handicaps Unlimited, for example, has only recently been organized and currently has very few members. Because the goals of SCS mesh so well with theirs and with the hope that recruited volunteers would also support other Handicaps Unlimited projects, that organization might welcome the opportunity to assist us with:

-recruitment

-staffing

-scheduling of volunteers

-coordination

-back-up for missing volunteers

-training, etc.

Recommendation #5: Development of a comprehensive training/orientation program for volunteers should begin immediately. If recruited volunteers are not given timely encouragement by the SCS staff, their initial enthusiasm and motivation will be lost.

"SPRING RECRUITMENT CAMPAIGN"

I Goal: To Recruit Thirty-five (35) SCS Volunteers.

II Organizational Steps:

(WHO) A. Establish a special committee or persons to plan and execute campaign:

(WHO) 1. Delegate responsibilities for recruitment:

a. Chairperson

b. Committee Members

1) Publicity

2) Clerical

3) Other

(HOW) B. Agree on techniques of Recruitment

(HOW) C. Evolve innovative techniques specific to the community:

1. Brainstorming

2. Delegated recruiters

D. Coordinate media campaign to coincide with recruitment:

1. Classified ads/feature articles

2. Radio spots

3. Flyers/posters

4. Church/school/organizational bulletins

(WHEN) E. Decide on specific time frame in which recruitment goal will be accomplished.

III Motivate Recruitment Staff:

A. Maintain contact with recruiters throughout the campaign to ascertain:
   1. Problems
   2. Progress
   3. Level of Enthusiasm

B. Design and utilize recruiter reports (Appendix A) that will be helpful in subsequent campaigns.

C. Give recognition for outstanding recruitment efforts.

DOCUMENTATION THREE

Current SCS User Program Guide

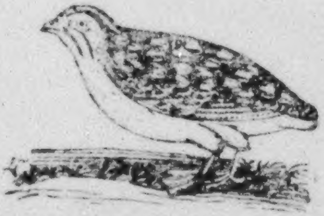
'CenTeX'

SPECIAL COMMUNICATION SERVICES

NOVEMBER 1982

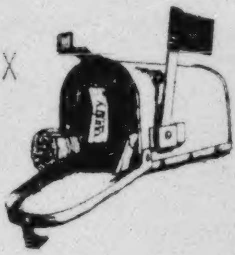
PROGRAM GUIDE

Happy Thanksgiving



SCS PROVIDES SPECIAL COMMUNICATION SERVICES TO THE VISUALLY, HEARING AND PHYSICALLY HANDICAPPED IN TIDEWATER VIRGINIA. SEVEN DAYS A WEEK, 24 HOURS A DAY, SCS BROADCASTS NEWS, ENTERTAINMENT, SPORTS AND SPECIAL INFORMATION TO THOSE UNABLE TO BENEFIT FROM CONVENTIONAL PRINT, RADIO OR TV MEDIA SERVICES.

PROJECT SCS-CENTEX
P.O. BOX 158
WILLIAMSBURG, VA. 23187



TELEPHONE: (804) 229-8541
OR TELETYPE 229-0768

SCS

NOVEMBER 1982

THIS MONTH, WE ALL HAVE MUCH TO BE THANKFUL FOR...MOST OF ALL, WE HAVE EACH OTHER!

WE ARE ESPECIALLY GRATEFUL FOR THE SCS VOLUNTEERS. MANY OF THEM ARE HERE AT 7:30 IN THE MORNING TO READ THE NEWS. OTHERS SPEND LONG HOURS IN THE AFTERNOON PREPARING NEWS AND WEATHER UPDATES.

NEXT MONTH, YOU WILL HAVE A CHANCE TO GET TO "MEET" AN SCS VOLUNTEER AND A FELLOW LISTENER!! "PROFILES" WILL APPEAR IN THE PROGRAM GUIDE AND ON-THE-AIR ABOUT THE PEOPLE WHO MAKE SCS POSSIBLE, AND THAT INCLUDES YOU. GIVE US A CALL IF YOU WOULD LIKE TO SHARE YOUR "PROFILE" WITH THE REST OF US.

****

DON'T MISS OUR THANKSGIVING WEEK SPECIALS!!! FROM 4 P.M.-4:30 P.M. ON TUESDAY, NOV. 23 AND WEDNESDAY, NOV. 24, SCS WILL BROADCAST SOME SPECIAL THANKSGIVING PROGRAMS.

****

A NEW SCS VOLUNTEER, JEAN HOUSE, IS PREPARING A FIVE-MINUTE DAILY DEVOTIONAL PROGRAM. IT IS CALLED "WAIT ON THE LORD" AND JEAN HAS A VERY THOUGHTFUL APPROACH TO ALL ASPECTS OF DAILY LIVING...INCLUDING OUR DAILY BREAD! LISTEN IN AT 7:25 A.M. FOR JEAN'S DEVOTIONAL.

NOVEMBER 1982

SCS PROGRAM GUIDE
WEEKDAY MORNINGS

7 A.M. -- TIMES-HERALD UPDATE

7:25 -- "WAIT ON THE LORD" DEVOTIONAL

7:30 -- EARLY BIRD NEWS
(LOCAL AND STATE NEWS READ LIVE FROM THE DAILY PRESS AND RICHMOND TIMES-DISPATCH)

8 A.M. -- WORLD WRAP-UP
(WORLD AND NATIONAL NEWS FROM NEWSPAPERS AND MAGAZINES)

8:30 -- MORNING MUSINGS

MON. - THE BREAD OF LIFE (FOOD FOR THE SPIRIT WITH JOAN POULIN)
TUE. - STAR WORLD
WED. - FIX-IT
THU. - DIALOGUE - MAGAZINE READINGS FOR VISUALLY HANDICAPPED
FRI. - BREAD OF LIFE (REPEAT)

9 A.M. -- LOCAL FOCUS

MON. - NORFOLK JOURNAL AND GUIDE (INCLUDING TONY BROWN'S JOURNAL)

WEEKDAY MORNINGS

9 A.M. CONTINUED

TUE. - GLOUCESTER-MATHEWS GAZETTE JOURNAL
WED. - THE WILLIAMSBURG ADVANTAGE
THU. - VIRGINIA GAZETTE (PART 1)*
FRI. - VIRGINIA GAZETTE (PART 2)*

*read by members of St. Martin's Episcopal Church

9:30 -- SPORTS WORLD

10 A.M. -- EDITORIALS

10:15 -- ADVICE: DEAR ABBY AND MORE!

10:25 -- OBITUARIES

10:30 -- LATE COFFEE BREAK
(REPEAT OF 7:30-8:30 MORNING NEWS)

11:30 -- SPECIAL PROGRAMS

MON. - TO YOUR GOOD HEALTH
TUE. - TRAVEL SHOW
WED. - MUSEUMS
THU. - GREEN THUMB
FRI. - WEEKLY OUTDOORSMAN

12:30 -- AUDIO PORTION OF C-SPAN (LIVE COVERAGE OF CONGRESSIONAL HEARINGS FROM WASHINGTON, D.C.)

1:30 -- C-SPAN (CONTINUED)

WEEKDAY AFTERNOONS

2:30 --C-Span (Continued) or RTTY

MON. -RTTY (BROADCAST FOR DEAF
STUDENTS AT THE HAMPTON
SCHOOL FOR THE DEAF)
TUE. - C-SPAN
WED. - RTTY
THU. - C-SPAN
FRI. - C-SPAN

3 P.M. --C-SPAN

4 P.M. -- CHILDREN'S STORIES, "JUST FOR FUN"

4:30 -- VIRGINIAN PILOT: NEWS OF NORFOLK

5 P.M. -- TIMES-HERALD UPDATE

5:30 -- MUSINGS (REPEAT OF 8:30 A.M.)

MON. - THE BREAD OF LIFE
TUE. - STAR WORLD
WED. - FIX-IT
THU. - DIALOGUE MAGAZINE
FRI. - THE BREAD OF LIFE

6 P.M. -- LOCAL FOCUS

MON. - NORFOLK JOURNAL AND GUIDE
TUE. - GLOUCESTER-MATHEWS GAZETTE
JOURNAL

WEEKDAY EVENINGS

WED. - THE WILLIAMSBURG ADVANTAGE
THU. - VIRGINIA GAZETTE (PART 1)
FRI. - VIRGINIA GAZETTE (PART 2)

6:30 -- RTTY (RADIO TELETYPE: WEATHER DEAF COMMUNITY ANNOUNCEMENTS, PENINSULA NEWS AND SPECIAL REPORTS)

7 P.M. -- CEEN: CABLE EDUCATIONAL ENTERTAINMENT NETWORK (VOICE ONLY PORTION OF CENTEX ORIGINATED PROGRAMS FOR CABLE TV)

MON. - EDUCATIONAL PROGRAMS FOR YOUNG PEOPLE
TUE. - ENHANCING THE CLASSROOM ENVIRONMENT
WED. - EDUCATIONAL PROGRAMS FOR YOUNG PEOPLE
THU. - ENHANCING THE CLASSROOM ENVIRONMENT
FRI. - EDUCATIONAL PROGRAMS FOR YOUNG PEOPLE

SCS
SPECIAL COMMUNICATION SERVICES

WEEKDAY EVENINGS

8 P.M. -- CEEN:

MON. - AMERICANS FROM AFRICA
TUE. - SPECIAL EDUCATION - CLASSROOM MANAGEMENT
WED. - COMMONWEALTH (PROGRAMS ABOUT VIRGINIA)
THU. - SPECIAL EDUCATION - CLASSROOM MANAGEMENT
FRI. - AMERICANS FROM AFRICA

8:30 -- CEEN:

MON. - INFORMATION FROM EXPERTS
TUE. - UNDERSTANDING SPACE AND TIME
WED. - VIRGINIA
THU. - UNDERSTANDING SPACE AND TIME
FRI. - INFORMATION FROM EXPERTS

9 P.M. -- CEEN:

MON. - ART AMERICA
TUE. - MEETING THE NEEDS OF THE MIDDLE SCHOOL STUDENT
WED. - ART AMERICA
THU. - MEETING THE NEEDS OF THE MIDDLE SCHOOL STUDENT
FRI. - KEEP IT RUNNING - CAR MAINTENANCE

WEEKDAY EVENINGS

9:30 -- CEEN:

MON. - DEVELOPING IMAGE
TUE. - (CONTINUED FROM 9:00)
WED. - DEVELOPING IMAGE
THU. - (CONTINUED FROM 9:00)
FRI. - (CONTINUED FROM 9:00)

10 P.M. -- CEEN:

MON. - MODERN VIDEO PROGRAMS
TUE. - COMMUNITY AWARENESS: ISSUES IN MENTAL HEALTH
WED. - MODERN VIDEO PROGRAMS
THU. - COMMUNITY AWARENESS: ISSUES IN MENTAL HEALTH
FRI. - SMALL BUSINESS MANAGEMENT

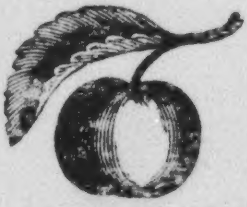
CEEN: CABLE EDUCATIONAL ENTERTAINMENT NETWORK (VOICE ONLY PORTION OF CENTEX ORIGINATED PROGRAMS FOR CABLE TV)

11 P.M. -- C-SPAN, LIVE AND TAPED PUBLIC AFFAIRS AND LEGISLATIVE ISSUES IN THE PUBLIC INTEREST

THE SPECIAL COMMUNICATION SERVICES TRY VERY HARD TO PROVIDE YOU WITH NEWS AND INFORMATION ABOUT YOUR LOCAL COMMUNITY AND NEWS OF INTEREST FROM VIRGINIA'S CAPITOL CITY AS WELL AS NEWS OF NATIONAL INTEREST.

WE ARE ESPECIALLY PLEASED TO OFFER OVER-NIGHT PROGRAMMING FROM C-SPAN. SCS OFFERS C-SPAN IN ORDER TO KEEP YOU IN TOUCH WITH ISSUES AFFECTING OUR NATION.

YOUR COMMENTS ABOUT OUR PROGRAMS ARE THE ONLY WAY WE CAN MAKE IMPROVEMENTS!!! WE WANT TO HEAR FROM YOU. WRITE OR CALL TODAY. THANKS FOR TURNING US ON.



DOCUMENTATION FOUR

SCS Evening Program Guide

CenTeX's

CEEN

Cable Educational
Entertainment Network
Williamsburg, Virginia

FALL
'83

A Holistic Concept in Family Viewing

CONTINENTAL-COX-NEWPORT NEWS-WARNER

THE CENTER FOR EXCELLENCE, INC.

IN COOPERATION WITH THE FOLLOWING CABLE SYSTEMS

CONTINENTAL CABLEVISION	JAMES CITY/COUNTY	CH.25
CONTINENTAL CABLEVISION	RICHMOND & HENRICO CTY	CH.34
COX CABLE TV, INC	NORFOLK, VA BEACH, PORTSMOUTH	CH.36
NEWPORT NEWS CABLEVISION	NEWPORT NEWS	CH.14
WARNER CABLE TV	HAMPTON	CH.25
	POQUOSON	CH.31
	WILLIAMSBURG	CH.16

PRESENTS

CEEN-CABLE EDUCATIONAL ENTERTAINMENT NETWORK

A HOLISTIC CONCEPT IN FAMILY VIEWING

CEEN's Program Objectives:

1. To provide significant, educational and entertaining programs for the entire family.
2. To provide an opportunity for the whole family to come together, within the home environment and share in the learning and problem solving processes.
3. To provide programming that will enhance the individual awareness and growth of students, parents and professionals in education, medicine and the social services.
4. To provide a service which will allow for federal, state and local agencies, institutions and individuals to share their resources with the public within the privacy and convenience of the home.

CEEN's programming will be available at no cost to any cable television subscriber with the systems listed above. The programming will be aired weekday mornings 8:00-12:00 and evenings 6:30-11:00. CEEN'S programming from 8:00-9:00 a.m., and 7:00-8:00 p.m., has been scheduled especially for the kindergarten and elementary levels. Parents are encouraged to watch the programs with the young people to assist them in maximum learning and growth. Our programming designed for professional development has been scheduled on Tuesday and Thursday evenings as well as Wednesday and Friday mornings.

If you have any questions, comments, or suggestions regarding CEEN's programming, please feel free to contact:

Ms. T. LaVerne Ricks-Brown
Director of Programming
CenTeX CEEN
P. O. Box 158
Williamsburg, Virginia 23187
(804) 229-8541

We encourage your input!

LOOKING FORWARD TO YOU AND YOURS JOINING US ON THE CEEN!

CEEN'S FALL '83 PROGRAM SERIES GUIDE

*"R" indicates when show is repeated

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
6:30 PM Of Public Interest	6:30 PM The Human Condition	6:30 PM Focus	6:30 PM The Human Condition	6:30 PM Of Public Interest
7:00 PM (R,Tues.8:00am) 9/19 Imagine That 11/21 Look	7:00 PM (R,Wed.8:00 am) Methods and Materials for Teaching Children with Learning Problems	7:00 PM (R,Thur.8:00am) 9/21 Raisin' Up! 10/19 Art Cart 11/23 Thinkabout	7:00 PM (R,Fri.8:00 am) Methods and Materials for Teaching Children with Learning Problems	7:00 PM (R,Mon.8:00am) 9/23 Imagine That 11/25 Look
7:20 PM (R,Tues.8:20am) Thinkabout				7:20 PM (R,Mon.8:20 am) Thinkabout
		7:30 PM (R,Thurs.8:30am) 9/21 Rights and Responsibilities 11/30 Problem Solving		
7:40 PM (R,Tues.8:40am) Inside Out				7:40 PM (R,Mon.8:40 am) Inside Out
8:00 PM (R,Tues.9:00am) Cast Your Own Shadow	8:00 PM (R,Wed.9:00 am) Dealing with Cultural Differences in the Classroom	8:00 PM (R,Thurs.9:00am) Close Up II	8:00 PM (R,Fri.9:00 am) Dealing with Cultural Differences in the Classroom	8:00 PM (R,Mon.9:00 am) Cast Your Own Shadow
8:30 PM (R,Tues.9:30am) Close Up I		8:30 PM (R,Thurs.9:30am) Modern Video Programs		8:30 PM (R,Mon.9:30 am) Close Up I
9:00 PM (R,Tues.10:00am Humanities	9:00 PM (R,Wed.10:00am) Methods and Materials for Teaching Children with Learning Disabilities	9:00 PM (R,Thurs.10:00am) The People's Potpourri	9:00 PM (R,Fri.10:00 am) Methods and Materials for Teaching Children with Learning Disabilities	9:00 PM (R,Mon.10:00 am) Humanities
10:00 PM (R,Tues.11:00am Modern Video Programs	10:00 PM (R,Wed.11:00am NASA Presents	10:00PM (R,Thurs.11:00am) Modern Video Programs	10:00 PM (R,Fri.11:00am NASA Presents	10:00 PM (R,Mon.11:00am) Modern Video Programs

THE ART CART (30 Min.)

Audience: Primary
Produced By: WBRA-TV

ART CART introduces primary students to painting, printing, weaving, collage, and puppets. It presents direct and practical approaches for presenting media techniques in these categories. ART CART shows the use of inexpensive and easily accessible materials and a variety of ways to accomplish a given skill.

"Painting" - Demonstrates the uses of flat and round brushes and tempera as a means of self-expression. Demonstrates a creative approach to color mixing and shading. Encourages students to experiment with paint and create an original painting.

"Printing" - Demonstrates techniques of printing, glue printing and object printing. States that object or junk printing has many forms. Reports that glue printing involves making a pattern or design to be printed. Notes that object printing is related to stamping.

"Weaving" - Introduces children to the technique of weaving by using the same skills in different projects. Begins with simple paper weaving for a clear demonstration and moves to fabrics and yarn.

"Collage" - Discusses collage and the various materials that can be used in its construction. Emphases on the use of imagination, arrangement and selection of the pieces.

"Puppets" - Demonstrates the construction of a variety of puppets, showing different ways to use the same materials. Shows actual use of a puppet by creating a voice and movements for a specific character.

"Mosaics" - Provides activities and experiences in making simple mosaics.

"Jewelry" - Provides activities and experiences in making simple jewelry.

"Paper Sculpture" - Provides activities and experiences in the use of paper sculpture and techniques.

"Clay" - Deals with primary art and provides activities and experiences in the use of clay.

"Crayons" - Provides activities and experiences in the use of crayons.

CAST YOUR OWN SHADOW (30 Min.)

Audience: Senior High
Produced By: WBRA-TV

CAST YOUR OWN SHADOW shows students the relationship between work in school and work as adults. Provides students assistance in becoming aware of possible careers, exploring these careers and eventually making decisions on which career to follow.

"Secretaries, Clerk Typist"

"Construction"

* * *

"Law Enforcement"

* * *

"Fast Foods"

* * *

"How To Start Your Own Business"

"The Ministry"

* * *

"Computer Careers"

* * *

"Veterinarians"

* * *

"Electronic Service Technician"

* * *

"Social Worker"

* * *

"Arts and Crafts As An Avocation"

* * *

"Jobs For The Future"

* * *

"Fast Foods"

* * *

"How To Start Your Own Business"

CLOSE UP I & II (30 Min.)

Audience: Secondary, College, Adult
Produced By: The Close Up Foundation

Focus and current updates on such topics as energy, law, U. S./Soviet relations and specific issues that arise during the month. A Washington-based government studies program.

DEALING WITH CULTURAL DIFFERENCES IN THE CLASSROOM (60 Min.)

Instructor: Dr. Carlton E. Brown
Audience: Adult, Professional Inservice
Produced By: CenTeX, Inc.

The overall content focuses on teaching groups of students from diverse cultures. These programs include such topics as teaching techniques, counseling approaches, curricula formats, behavioral characteristics, methods for motivation and alleviating inter-group conflict. This is a definite learning experience for all who watch.

HUMANITIES (60 Min.)

Audience: Secondary, College, Adult
Produced By: Various State Foundations for the Humanities & Public Policy and Indicated Agencies

"Battle Born: MX in Nevada" - The sensitive issue of the development of the MX missile system in the Great Basin area of Nevada and Utah is deliberated through many interviews, Air Force films and defense plans. Ranchers, small town ministers, Indians, business people and artists voice their concerns --- which are juxtaposed with the official government position. (Nevada Humanities)

"Refugee Road" - A documentary which follows the experiences of a Laotian Nout family during their journey from a refugee camp in Thailand through their resettlement in central Ohio. The program focuses on the Laotians' adjustment to American ways of life while retaining their own ethnicity and their relationships with those who introduce them to American life. (Ohio Humanities)

"Doin' Life" - One of the most intriguing, controversial documentaries ever filmed about prison life. Exclusive footage from a series of interviews inside the cells of five prisoners doing life in prison in Texas. The inmates describe their incarceration and rehabilitation, recount the incidentals of their crimes and plead for parole. Interviews with remaining family members of their victims contrast the inmates' testimony with their personal pain at the loss of their relatives. The program reserves the judgement of each case for all of us in its concluding presentation: How Long Is A Life Sentence? Which Convicts Deserve Parole? (Texas Humanities)

"Subsistence - Our Way of Life is Dying" - Native American life patterns: interdependence and conservation. A program as good as any National Geographic special. Interviews with Native Americans concentrate on two Federal laws -- migratory birds and mammal protection, which jeopardize Native American life cycles. (Alaska Humanities)

"Saltwater People" - Small reef salmon fisherman use nets to trap fish off the Washington coast. Contrasting views of heavy fishing industry and small independent fishermen are supplemented with a narration by a Skagit Native American woman. (Washington Humanities)

"American Images" - Farm Security Administration photographs of the depression (1935-1942) including famous pictures by Walker Evans, Ben Shahn and Dorothea Lange. A retrospective was conducted in 1979, photographers commented upon their mission to capture the American spirit on film. (Texas Humanities)

"Rosebud to Dallas" - Relocation of Native American families, from Western reservations to large cities in an attempt to secure jobs. First hand accounts and old Bureau of Indian Affairs films are combined in a study of a complex cultural problem, (Texas Humanities)

"The Earth is Our Home" - A panoramic view of the Great Basin areas of Oregon and Utah and the living culture of the Paiute and Shoshone Native Americans. This is a spectacular visual feast and an honest portrait of a spiritual people. (Oregon Humanities)

"Apache Wars" - Rare photos of Native American history and an Apache perspective on settlement of the West and weapons trade with the early Spanish conquerors. Here's the other side of those Hollywood Westerns. (Arizona Humanities)

"Stewardship of the Earth" - David Brower, former Executive Director of the Sierra Club and Founder of Friends of the Earth, delivers a sobering, ecological assessment of the growing imbalance of natural life systems on our planet. His challenge demands personal responsibility and a commitment to change a greedy world's habit of diminishing our non-renewable resources to preserve our present needs. (Arkansas Humanities)

"City Visions" - Questions about the quality of life in urban environments, design considerations fuse with human considerations. Features film from many big cities: San Francisco, Portland, Seattle, New York City. Interpretations of architects like Paolo Soleri and landscape architects, Lawrence Halprin and Frederick Law Olmstead. Use of wall murals, waterfalls, fountains and smells and sounds of nature to create a pleasant environment. (Florida Humanities)

"Make It Bloom - The River In The Desert" - Land and water use of Colorado River ... Repercussions of technology and modern dreams upon nature, the cycle of cause and effect. This is an inspiring, breathtaking program. (Colorado Humanities)

"Japan - Northwest" - Japanese culture contrasted with the American sensibility ... Effects of Japanese style on NW coast architecture, arts and crafts ... Beautiful pacing and visuals - including Zen monasteries and temples. (Washington Humanities)

"A Place Called Rohwer: Memories of Camp Life" - During the wartime hysteria of WWII the U. S. Government incarcerated 110,000 Japanese-Americans in ten camps. Two were located in southern Arkansas. This program features interviews with the sole remaining resident of the camp still living in Arkansas, Sam Yada, and the recollections of Rev. Joseph Hunter, former Assistant Director of Rohwer. Photographs from the National Archive recreate the crowded, dusty camp life which was such a sad experience for so many residents. (Arkansas Humanities)

"Other People Make Me Feel Old" - Do you know what it feels like to be old? This film looks at aging from a dozen angles and provides more thoughtful discussion about integrating the elderly into society. (Oklahoma Humanities)

"All That I Marry" - Several women's lives are juxtaposed in an examination of womens' roles, images of themselves, definitions of marriage and working. Contemporary and interesting. (Pennsylvania Humanities)

"Mountain People...A Sense of Place" - An inside look at Appalachia and essential elements of this mountain culture. Many cliches are overturned when you see beneath the surface and a deeper appreciation of these people is formed as the program progresses. (West Virginia Humanities)

"Arizona State Prison - The Writer's Workshop" - Rehabilitation issues are investifated through interviews with inmates and former inmates, corrections people and writers who wonder whether creative workshops are viable for inmates. On-location footage of inmates reading their work seems to indicate that this may be a successful approach. (Arizona Humanities)

"Andy" - The story of a young boy who lost both arms in a farm accident. He now uses his feet to write, eat, use the telephone and carry on normal living. This is a touching example of courage and will which has been nurtured by the love of the boy's family and friends. (Ohio Humanities)

"Legacy of the Depression: Parts I and II" - How the great depression affected agriculture life..Old footage and interviews with midwestern farmers trace the psychological, economic and social effects upon the fabric of their lives. (Nebraska Humanities)

"Welcome to God's Country" - At the crossroads between the past and the galloping present, a small community in rural Alabama seeks to preserve the closeness of their town, while generating jobs which will prevent the younger generation from migrating to the cities. If you could travel back to your childhood days, it would probably look just like this, but this is no memory, this is still real. (Alabama Humanities)

IMAGINE THAT (20 Min.)

Audience: Primary, Elementary
Produced By: WBRA-TV

IMAGINE THAT focuses on primary level movement education by using simple things such as a scarecrow, newspaper, marionette and circus to provide experiences.

"You Are Somewhere Else" - Uses a circus to provide gross motor experiences, hand-eye development and rhythmical movement.

"You Made Some Other Noise" - Uses a Dixieland Band to provide gross motor and small motor experiences, rhythmical movement, rhythmical patterns and listening skills.

"You Are A Zoo Animal" - Develops student participation through use of animal walks, utilizes visuals of the animals to provide creative discoveries for students.

"You Have A Favorite Partner" - Develops student participation through use of partners. Shows students performing creative, rhythmic movements to music.

"You Have A Little Friend" - Develops student participation through use of exercises. Show students performing exercise patterns while improving rhythmic, gross motor and listening skills.

"You Are In Outerspace" - Develops student participation through use of an outerspace theme. Encourages creativity by having students utilize gross motor skills, pantomine and streamers.

"You Are Something Else" - Expresses primary level movement education by using a marionette to provide basic locomotor non-locomotor skills.

INSIDE OUT (20 Min.)

Audience: Elementary, Junior High
Produced By: AIT

INSIDE OUT helps students achieve and maintain mental, emotional and physical well-being It engages the minds and feelings of 8 to 10 year olds through the presentation of situations common to their lives. Involves peers, teachers and parents. Employs an open-ended technique without given solutions. Notes the importance of follow-up activities.

"Breakup" - Helps children recognize and develop some understanding of emotions involved in a separation or divorce, real or imagined.

"Love Susan" - Designed to help children recognize and cope with parental misunderstanding and mistreatment and to help them understand how both parents and children can unintentionally cause conflicts within even a loving family.

"Brothers and Sisters" - Helps children recognize and cope with sibling rivalries and to help them realize that their actions can affect the feelings of other family members.

"Someone Special" - Shows that crushes are a normal part of growth and psychological development, and to help them understand the feelings that such situations create in both children and adults.

"I Want To" - Enables children to consider and cope with feelings caused by differences between themselves and adults about what they want to do, are able to do and are allowed to do.

"When Is Help" - Shows children when they should give or receive help and to assist them in understanding the feelings that result from helping someone or from being helped by another person.

"Bully" - Helps to recognize and cope with harrassment, and to help them understand the feelings of violence and terror that bullying situations produce.

"But They Might Laugh" - Assist to recognize and cope with their own fears of humiliation and failure and to help them understand and symphathize with such feelings in others.

"Lost Is A Feeling" - Helps children understand how persons can feel lost and threatened in new situations and to help them learn to cope with such feelings through the support of others.

"Donna" - Reveals how persons learn to accept whatever it is that makes them feel different from others and to help them recognize that the process of becoming a person is in many ways very much the same for everyone.

"You Belong" - Recognizes the interdependence of all things and to help children increase their own sense of responsibility for the environment.

"Just One Place" - Enables children to develop personal convictions about their responsibilities in maintaining an environment of humane quality.

"Yes, I can" - Recognizes the value of overcoming obstacles and to help children understand the feelings of self esteem and sense of accomplishment brought about by independent action.

LOOK (20 Min.)

Audience:	Primary and Elementary
Produced By:	WCVE-TV

LOOK exposes students to art forms found in areas of their life with an emphasis on observation, appreciation and relationship to art experiences. It deals basically with art appreciation and takes students to places in Virginia that have inspired adult artists of the past and present.

"Animals" - Visits the farm area in Maymont Park in Richmond to look at lines, shapes, and textures found in animals. Asks students to identify animals by having the camera focus on their feet.

"Media" - Discusses radio and records as non-visual media. Shows equipment used at a television station and presents spoofs of a quiz shop, an entertainment show and a soap opera.

"Construction" - Explains the steps in the construction of a pre-fabricated building. Observes methods of joining materials and objects. Visualizes drawings inspired by shapes seen at a construction site.

"The City" - Views students as they beautify an area by painting an old park gazebo. Tells that they decorate it with city scenes they feel important. Points out types of buildings and architecture. Includes Greek, Roman and contemporary. Presents an adult artist who shows some of his cityscapes and talks about what influenced his work.

"The Farm" - Explains about caring for animals and shows the daily performance of chores. Views farm buildings and explains the styles of barn architecture. Includes paintings by adult artists which were inspired by farms.

METHODS AND MATERIALS FOR TEACHING CHILDREN WITH LEARNING PROBLEMS (60 Min.)

Instructor:	Dr. Brenda T. Williams
Audience:	Adult, Professional Inservice
Produced By:	CenTeX, Inc.

These programs concentrate on types of learning problems found in the elementary classroom. They focus on specific strategies and materials designed to meet the academic needs of students with particular learning disabilities.

METHODS AND MATERIALS FOR TEACHING COMMUNICATION SKILLS TO TEACHERS (60 Min.)

Instructors:	Ms. Corrine Droessler Ms. Veronica Nowak
Audience:	Adult, Professional Inservice
Produced By:	CenTeX, Inc.

This program is designed to help teachers acquire the skills for implementing the Standards of Learning Program. Topics of focus include theories on speech and language development and strategies for developing students' communication skills.

MODERN VIDEO PROGRAMS (60 Min.)

Audience:	Secondary, College, Adult
Produced By:	Various indicated agencies

A wide variety of programs in such areas as business, consumer inquiry, modern life and visitours.

"The Last Drop" - Explores the issue of water conservation.

"Souvenirs" - The workmanship of the Russian artisan is highlighted.

"Patterns of Play" - The British Post Office commemorative stamps for racket sports are depicted.

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"The Haunted Mouth" - This unique approach to preventive dentistry takes viewers into the house of Invisible B. Plaque.

"Portrait of the Enemy" - Uses the analogy of basketball game strategy to show how to deal with gum problems

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"The Name of the Game is Soccer" - Exciting and comprehensive look at North America's fastest growing sport.

"Just About the Quickest, Safest, Cheapest Cooking Method Ever" - Discover how to prepare mouth-watering nutrition-laden means in a pressure cooker.

"The FED - Our Central Bank" - Explains the role and responsibility of the Federal Reserve System"

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"The Hospital, The Surgeon and You" - Learn what a surgeon does to keep himself abreast of the latest advances in surgical care.

"A Word To The Wise" - Explores the few easy stems involved in becoming a wise dental consumer.

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"Sugar Mountain Blues" - Adventurous mountain climbing weekend with a group of young diabetics.

"A Home For Osmar" - Rebuilding of a Guatemalan town after the earthquake.

"Let's Do This More Often" - Quick and easy ways to prepare leftovers to stretch food dollars.

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"Get Out Alive" - Information received in this program can save your life in the event of a high-rise fire.

"Silver Linings" - Participation in social and community affairs by a senior citizen group.

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"Running Hard, Breathing Easy: The Jeanette Bolden Story" - An inspirational program showing how Jeanette Bolden has overcome asthma to become a world class track sprinter.

"Sesame Place" - An innovative "people-powered" park where families with children ages 3-13 play and learn together.

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"A Gathering of Minds" - Highlights Thomas Edison and his contributions to mankind.

"The Eternal Light" - Explores efficient and cost effective ways to utilize solar power.

"Dr. Albert Szent-Gyorgyi and the Cancer Dragon" - A look into the mind of a genius.

"Snowshoe Priest: - Recalls the work of Father Baraga in Michigan 100 years ago.

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"Noah Was An Amateur" - A journey through the history of boat-making.

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"Partners" - Clift Robertson narrates this program about the humanitarian work of the International Guiding Eyes.

"Sight Restoration" - How the sight of thousands of people can be restored or saved through Lions Clubs' supported and operated eye banks.

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"Food, Glorious Food" - Highlights of the 1980 International Culinary Competition in Frankfort.

"The Bionic Ear" - Electronic device being developed in Australia may increase communication capacity for the deaf.

"From Field to Table--The Story of California Iceberg Lettuce" - A tour of California's major Iceberg Lettuce production areas.

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"Some Children Need Special Care" - Emphasizes the assistance needed by handicapped people in developing and maintaining good oral health habits.

"Portrait of the Enemy" - The analogy of basketball game strategy is used to deal with peridontal disease.

"Portrait of a Killer: - Details Reye's Syndrome, one of the top ten killers of children.

"Spring Quartet" - Depicts an English artist's work to design a set of pictorial stamps for the British Post Office.

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"Images of Knowing" - Anne Baxter narrates this thoughtful program on the relationship of our inner spiritual being to the natural world.

"Some Children Need Special Care" - Emphasizes the assistance the handicapped need to have for things that they may not be able to do themselves.

"Shiko Munakata-Master of Woodblock Print" - A lively portrait of the renouned master of woodblock print.

"Three Encounters With Japan" - Story of three artists living in Japan who devote themselves to its traditional arts.

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"Man and His Gold" - Barry Sullivan hosts this depiction of the history of gold and its modern roles.

"All The Queen's Horses" - Patrick Oxenham's pictorial stamps featuring four breeds of horses indigenous to the British Isles.

"The Wonders of Wheat" - A look at the development of the "staff of life".

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"Moscow" - Accompany a young couple on a morning-to-night tour of Moscow.

"Evening Entertainment" - A kaleidoscopic tour of Russian nightlife, featuring theatres, the ballet and puppet acts.

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"Crafts of EDO" - Introduction to EDO masterpieces, designs and craftsmen.

"Narrative Picture Scrolls" - Exquisite museum works representing the story-telling art of twelfth to sixteenth century Japan.

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"The Hague, a Monument" - The citizens of the Hague and what they are doing with their town and historic monuments.

"The Fellows" - Looks at the International Fellowship Program sponsored by ITT.

"The Best is Yet To Be" - The role of the parent is the oral health of their children.

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"Making Things" - Assist young men and women in seeking satisfying and lucrative jobs in the machine tool industry.

"A Portrait of Power" - The story of coal as a practical and efficient alternative to natural gas and petroleum.

"Corner of the World" - Visit to the Ontario Science Centre, a one-of-a-kind invention.

"They Shouldn't Call Iceland Iceland" - Explore the land of the northern sun.

"Dollars Make Sense": - Boating as a community resource.

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"Nuclear Waste Isolation: A Progress Report" - Progress report on what is being done to find a safe disposal system for highly radioactive waste.

"Golden Harvest" - Fast moving story of California canned peaches and fruit coctail.

"Farmers Who Bank on Themselves" - Focus is on capital funds in keeping American agriculture modern, productive and healthy.

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"Siberia Invites You" - Visit Siberia, a land of incalculable wealth made up of majestic forests and mighty rivers.

"The Volga Cruise" - Travel the Volga River in Russia on a cruise starting in Kazan and ending in Rostov.

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"Odyssey: A Quest for Energy" - An exploration of our future energy sources.

"Winter in Ontario" - Discover the delights awaiting you in winter in Ontario.

"Rolling Along" - How bowling provides relaxation for women.

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"A Gathering of Minds" - Highlights Thomas Edison and his contribution to mankind.

"The Eternal Light: - Explores efficient and cost effective ways to utilize solar power.

"Albert Szent-Gyorgyi And The Cancer Dragon" - A look into the mind of a genius.

"Snowshow Priest" - Recalls the work of Father Barage in Michigan 100 years ago.

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"The Link Between Us..Electronics" - Kenny Rogers, Eric Sevareid and Stevie Wonder create a moving portrayal of the daily influences of the electronics revolution.

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"Colored Nabeshima Ware" - Production of handpainted Iro-Nabeshima ware of Kyushu.

"Kites of Japan" - An exploration of over 200 kites from various regions of Japan.

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"Whoever You Are" - The late Henry Ford narrates as a family learns how to cope with recurring symptoms of arthritis.

"Born Again" - Unique success stories of handicapped artists.

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"Man and His Gold" - Barry Sullivan hosts this depiction of the history of gold and its modern roles.

"The Promise of Life" - The social and humanitarian work of the Knights of Columbus.

"Curse Not the Deaf" - Dana Andrews stars in this story about hearing loss.

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"5000 Brains" - Journalistic documentary exploring man's desire to know.

"Fishing in Northern Ontario" - Features the return to the North of an inveterate fisherman seeking a trophy fish.

"Smile at Any Age" - Informative overview of orthodontics.

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"Endless Energy" - Dr. Edward Teller, renouned physicist, explores the possibility of our energy future.

"Everything Rides on the Roads" - How America's economy depends in one way or another on her roads.

"Seven Days of Festivale" - A funfilled excursion aboard the luxury liner Festivale.

"The Near North" - Explore over 2,000 square miles of vacationland in Ontario Near North.

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"Catch Hollywood in the Act" - Richard Anderson hosts this action-packed tour of Universal Studios.

"A Century Crystalized" - Efrem Zimbalist, Jr. narrates an extraordinary look at the works of artists located at the Pepsi Company Sculpture Gardens.

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"Great Gardens of the World - Holland" - Explores the history of the tulip and the significance for the Netherlands of the export of bulbs overseas.

"A Touch of Gold" - Television personality Susan Blakely tells the story of gold jewelry through the ages.

"The Empty Ark: 2002" - William Shatner narrates as early American paintings and old film footage illustrate our attitude toward native animals.

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"Obesity" - Dr. Lester B. Salans explains our energy metabolism.

"Without Warning" - Describes the dangers of high blood pressure and illustrates what happens.

"Salt..The Essence of Life" - The story of salt and its importance to man and animals

"Day At The Zuyder Zee" - A glimse of the lands which are part of the Zuyder Zee project.

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"If You Loved Me" - Sensitive drama about a family's struggle with alcoholism.

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"The Dream-Brazil" - All the beauty of modern Brazilia is captured, while telling the story of Brazil's dream of greatness.

"Soft is the Heart of a Child" - Portrays the confusion, neglect and physical abuse children must endure in home environments affected by alcoholism.

"The Fellows" - Informative and appealing look at the International Fellowship Program sponsored by ITT.

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"Our Brothers' Keeper" - Powerful drama about the struggle of an alcoholic physician.

"Portrait of a Killer" - Dramatic, informative feature detailing synptoms and signs of Reye's Syndrome to look for in a child.

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"Adventures in the China Trade" - An exploration of China's economic priorities and how American business can "plug in" to this land of government-owned enterprises.

"Zen Culture, Zen Spirit" - Presents the living reality of Zen today.

"Pat Boone and the Kids" - Pat Boone tells viewers about the only home in the U. S. which cares exclusively for prisoners' children.

NASA PRESENTS (60 Min.)

Audience: Secondary, College, Adult
Produced By: The National Aeronautics and Space Administration (NASA)

"Who's Out There?" - Orson Welles is the host and star of this extraordinary half hour program. A number of distinguished scientists conclude that there is some one out there, in outer space. From the monstrous Mars life forms of his famous 1938 radio broadcast, "The War of the Worlds", Orson Welles takes us through science fiction to science facts -- to the new view of extraterrestrial life now emerging from probes to the planets -- to interstellar discoveries and findings about the nature of life itself. The program is a facinating portrayal of a contemporary scientific conclusion that there exists intelligent civilizations in the universe - a real picture as astonishing as any science fiction.

"Flying Machines" - Emphasizes aviation today and tomorrow. How we got where we are and plans for future research and development. Wind tunnels - power plants- materials safety- comfort- economy- fuel-saving- speed- convenience- efficiency- noise abatement. NASA aeronautical research has answered some tough questions and is looking to solve current problems and innovative solutions.

"Apollo 4 Mission" - The story of the assembly and launching of the first unmanned Apollo/Saturn V space vehicle. Shows detail of the stage separation, acceleration to an altitude of 11,232 miles above Earth, and effects of re-entry on the unmanned Apollo command module at a speed of approximately 40,000 kilometers (25,000) miles an hour.

"Debrief: Apollo 8" - The story of man's first journey in orbit around the moon with comments on the significance of the Apollo 8 flight by several prominent Americans. The program features photography of the lunar surface, the Earth as seen from the moon and the on-board activities of astronauts Borman, Lovell and Anders.

"The Flight of Apollo 7" - A report on the first manned mission in the Apollo series. Major events covered are the launching, rendezvous and docking maneuvers, television transmissions, re-entry and recovery. The program includes scenes of astronauts Schirra, Eisele and Cunningham living and working aboard the command module during their 11-day earth-orbital flight.

"Apollo 9: The Space Duet of Spider and Gumdrop" - An introspective view of the Apollo 9 astronauts, McDivitt, Scott and Schweickart, before, during and after their earth-orbital mission. With minimal narration and special music, the program concentrates on the launching, rendezvous and docking of the command module (Gumdrop) and the lunar module (Spider) and the return and recovery of the crew.

"Apollo 10: Green Light for a Lunar Landing" - Features highlights of the second lunar orbital mission by austronauts Stafford, Cernan and Young, including docking and descent of the lunar module within 16 kilometers (10 miles) of the lunar surface. This mission, which was a "dress rehearsal" for the first lunar landing, provided good news of the moon and the earth.

"Apollo 12: Pinpoint for Science" - Emphasizing the scientific studies involved and the pinpoint accuracy of the landings this program documents the second manned lunar landing in November 1969. Highlights of this mission flown by Astronauts Conrad, Gordon and Bean include the placement of scientific equipment on the moon, inspection of an unmanned Surveyor spacecraft landed on the moon in 1967, collection of soil and rock samples and extensive photography.

"Where Dreams Come True" - A look at career opportunities in NASA for minorities and women. Says actor Ricardo Montalban in the narration of this film, "You don't have to be an astronaut or a scientist to work for NASA. The organization offers jobs ranging all the way from clerks, secretaries, electricians, safety engineers and administrators straight through to system analysts, computer programmers, scientists, and last but not least, astronauts." Excellence, a positive outlook on life and ones' work and a vivid imagination are some of the key ingredients that NASA looks for in its perspective employees. This program will be a valuable source of information for not only minorities and women, but anyone who is interested in knowing what it is like to work for NASA.

"Apollo 13: Houston-We've Got a Problem" - The dramatic fight to return the crewmen of the Apollo 13 mission safely to earth following an explosion on board the service module. Emphasizes mission control and spacecraft teamwork in overcoming the life-or-death problems of Apollo 13 as well as worldwide reaction to the crisis.

"Apollo 14: Mission to Fra Mauro" - A factual documentary account of the mission. The program includes problems encountered on the way to the moon and how they were solved. It then depicts the activities during the scientific and geological traverses on the moon and the return journey to earth.

"Apollo 15: In the Mountains of the Moon" - Story of the highly successful 4th lunar landing mission. Includes details of the three lunar surface scientific expeditions, the experiments in lunar orbit and the dramatic return to earth.

"Apollo 16: Nothing So Hidden" - This program is a visual documentary account of the Apollo 16 lunar landing mission and exploration in the highland region of the moon, near the crater Descartes. Through the use of cinema verite techniques, the real time anxieties and lighter moments of the support teams were captured in mission control and the science support room. The program includes some of the most spectacular lunar photography of any Apollo mission.

"Apollo 17: On The Shoulders of Giants" - A documentary view of the Apollo 17 journey to Taurus -- Littrow, the final lunar landing mission in the Apollo Program. The program depicts the highlights of the mission and then relates the Apollo Program to Skylab, the Apollo/Soyuz link-up and Space Shuttle.

"Zero-G" - A facinating introduction to weightlessness aboard space station Skylab. In this high orbiting laboratory, men float gracefully and freely in three dimensions, performing experiments which can only be done in zero gravity.

"Magnetism in Space" - The earth's magnetic field extends far out into space. Its presence can be clearly demonstrated by releasing small magnets inside an orbiting spacecraft. The program reviews familiar aspects of magnetism and explores the behavior of magnets in weightlessness.

"Assignment: Shoot the Moon" - Summarizes the exploration of the moon conducted through unmanned Ranger, Surveyor and Lunar Orbiter spacecraft, and shows how such detailed data and photography contributed to the first manned flights to the moon. The program describes the complexities of closeup photography of the moon and includes good views of craters, mountain ranges and other lunar terrain.

"The Mission of Apollo/Soyuz" - The Apollo/Soyuz mission was a precedent setting event in the sphere of international manned space flight. The program stresses the spirit of cooperation and friendship that helped make the mission a success. It generally follows the mission timeline, with appropriate flashbacks to detail the period of development and training and concludes with a projection on the future of international cooperation in space featuring the Space Shuttle and the European development, Spacelab.

"The Flight of Faith 7" - The story of the last flight in the one-man Project Mercury series. The program follows Astronaut Gordon Cooper from pre-flight training through the launching, earth orbital flight and recovery.

"The Four Days of Gemini 4" - Documents the first extravehicular activity or "walk in space" by an American astronaut during the Gemini 4 mission. Details of the Gemini space suit and a "space gun" propulsion system are shown, as well as the mission activities of astronauts White and McDivitt.

"If One Today - Two Tomorrow" - Addresses the need for the world wide use of communication technology for learning and growing as world population increases. The program takes you to India, Pakistan, El Salvador, Niger, Kenya, Thailand, Equador, Bolivia, Guatemala, Alaska and to remote Indian communities in the U. S. It graphically describes how radio, television and communications satellite systems are used as instruments for education.

"X-Ray Spectroscopy" - Dr. Robert J. Liefeld Professor of Physics, New Mexico State University, explains how X-rays are generated and how an X-ray spectrometer disperses them into a spectrum. He shows how specially grown crystals are made and used in a two crystal vacuum X-ray spectrometer to diffuse an X-ray beam, isolate a single wavelength, scan a spectrum and record its characteristics.

"Jupiter Odyssey" - This is the story of the 620 million mile journey of Pioneer 10 to the planet Jupiter. This was the first spacecraft to travel beyond Mars to the outer planets of our solar system. During the 21 month trip to Jupiter, Pioneer penetrated the previously unexplored asteroid belt without mishap, eliminating the long held fear that high speed particles, or huge asteroids might destroy the spacecraft. The program tells of the findings and questions raised about the mysterious planet that were recorded by the scientific instruments and cameras on board. After leaving the Jovian system of the huge planet with its 12 orbiting satellites, Pioneer is on a course that will cause the spacecraft to leave our solar system and wander endlessly through our Milky Way Galaxy, carrying a message for possible extraterrestrial beings.

"Legacy of Gemini" - In the perspective of a single composite mission, this documentary illustrates the major accomplishments of the Gemini two-man space flights and the growing as world population increases. The program includes outstanding photography of the earth and man in space.

"Man's Reach Should Exceed His Grasp" - This program represents the story of flight and of man's reach for a new freedom through aviation and the exploration of space. From the Wright Brothers flight at Kitty Hawk to the landing on the moon and future missions to the planets, the program depicts the fulfillment of the ancient dream of flight. Through the use of multiple images, the creative role of research is emphasized. Voices of scientists and statements by writers, poets and philosophers document man's search for knowledge. The program is narrated by Burgess Meredith.

"Planet Mars" - For centuries whenever men looked on Mars through their telescopes the planet appeared to them to be earthline - a planet on which life could possibly exist. Mars, the Red Planet, was given top priority in planetary explorations and we have sent spacecraft to observe and to photograph Mars. This program is an intriguing story of the exploration of our celestrial neighbor.

"Research Project X-15" - Shows the development of the experimental X-15 research airplane which took test pilots to the edge of space. Dramatic photography of flights of the X-15 and landings on the dry lake beds of California are included.

"Space Shuttle - Mission to the Future" - The four ships of the Space Transportation System, Challenger, Discovery, Atlantis and Columbia are each capable of 100 missions into space and returns to earth. This show gives a broad view of the aims and the benefits to mankind of this program. In the next few years, more than 60 flights have been scheduled with Space Shuttle. The payloads and the crews will be international.

"STARPAHC" - STARPAHC is an acronym for a combined NASA and U. S. Indian Health Service Program. By portrayal of an individual illness, the audience is given an understanding of the workings of the health delivery system on the Arizona Papago Reservation. The patient, stricken at a remote village, is followed through progressive health care stages, leading to diagnosis and treatment. Facilities, equipment and personnel functions are explained in concert with detailed methods of operation.

"A View of the Sky" - By use of symbolic photography, this program explores various historical theories of the origin and order of the solar system from Copernicus through Einstein, with a brief look at modern scientific exploration of space.

"The World Was There" - This program shows how the news media of the world covered the manned space launches of NASA's Project Mercury. Al Shepard makes the first U. S. suborbital flight and is awarded a medal by President Kennedy. Gus Grissom makes a suborbital flight and is almost lost during a dramatic recovery. John Glenn's three orbits of earth, the New York and Washington receptions including his speech before Congress is given wide medium coverage. Scott Carpenter's flight, the long recovery period when he was out of contact, and his meeting with his family is shown. Wally Schirra's launch and recovery is documented. A major part of the program deals with the Gordon Cooper flight - its preparation, the 22 orbits of earth, the recovery and receptions in Hawaii and Cape Kennedy.

THE PEOPLE'S POTPOURRI (60 min.)

Audience: Secondary, College, Adult
Produced by: Walter J. Klein Company

"How to Lose Weight" - Two elephants open this delightful program. "What's up?" "Don't ask. Just had my yearly physical. Doctor told me to lose 200 pounds and take up jogging." Zoo animals are cleverly juxtaposed with humans throughout this unforgettable tour through the world of proper dieting. How much weight should you lose? How fast? What are the traps to avoid?

"The Lusers" - This program is replete with eye-openers to help viewers take pounds and inches off promptly, safely and wisely. Network newscaster Peter Hackes reveals how to make a diet a real success by changing eating habits and increasing physical exercise. He offers specific, memorable examples. Anti-stress foods are shown. The memory diet is covered. Creativity in dieting is discussed.

"The Natural Tan" - Hilarious pantomimes of the frustrated hero, trying to gain a natural suntan, introduces a quarter-hour of engaging education on the subject of suntans. Viewers learn about proper exposure to the sun and to sunlamps, and most important - what not to do.

"Consumer's Guide to Skin Care" - Millions of women not only fail to treat their skin properly - they mistreat it. By viewing this unique program, women can understand skin chemistry. They learn how to maintain a balanced skin condition. They find the only real trick is developing a regular daily habit of facial care. A full skin care program is demonstrated to show women proper cleansing, stimulation of circulation, toning, conditioning and protecting.

"Executive Productivity" - Executives have a productivity crisis. They must break old habits and learn new ones. This program defines and demonstrates both. Executives can speak 100 words per minute, but write only 15. Paperwork stifles thinking and planning. Most office modernization goes to staff and not to executives. Interruptions ruin vital schedules. New executive communication tolls increase executive efficiency remarkably.

"Wings and Wheels" - How long have people been renting cars? Twenty years? Forty? Would you believe over sixty? For the first time the story of renting automobiles is told on film in this fast-moving, around-the-world look at a unique phenomenon. We see the concept of fly-drive evolve. Viewers see how vehicle renting gives the world a new mobility. The idea of rent-it-here, leave-it-there comes of age. Businesses switch from buying cars during an energy crisis and when air travel costs tumble. Viewers see how renting cars has developed into a way of life for a people on the move.

"Traveler's Cheques: A Safer Way" - When man learned to fly, his emancipation from travel restrictions was complete. But with travel came the need to carry funds safely for living and traveling expenses. This first objective program about travelers cheques takes the viewers behind the scenes to witness the design, printing and safeguarding of these unique financial instruments.

"The Right Move" - Moving to a new city can prove a deep shock to children as well as to the rest of the family. Or it can be a sweet and positive life experience. This special program shows how children should be prepared as well as one's possessions for the important move to the new location. How to pack and move pets, plants, valuables? How to sell what you leave behind? What tax advantages? When to move? Which professional mover to use? What troubles to avoid?

"A Working Solution" - Part-time work...It brings in money, permits one to choose his/her own hours, and to continue other pursuits and obligations like bringing up children. The temporary help company is the special phenomenon that is the subject of this unique program. We see how they organize part-time work for hundreds of thousands of people quickly and successfully. We learn how to go about getting temporary or part-time employment that matches our skills and needs.

"A Whole New Image" - The image of success in the business world just may include what people wear. This program about the uniform industry positions business uniforms as a source of teamwork, recognition, identity and pride. Employers learn the relative merits of buying or renting, which uniform fabrics are best for comfort, laundering, color and shrinkage stability, damage resistance and strength. Viewers can see the design and manufacture of contemporary uniforms - including trend setting high fashion outfits.

"The Beautiful Balloon Ride" - What better way to see the land of the Tar Heels? It's the only way to fly! You get right into a huge and delightful balloon and transcend daily details to soar over the heart and soul of North Carolina. You feel the clouds and sunshine and share the sky with hanggliders, helicopters, kites and birds. From the mountains to the sea you glide majestically to witness mountains bears, a children's railroad, the Biltmore estate, craftsmen at work, the Blue Ridge Parkway, the handsome lifestyles of the Piedmont, blind people enjoying their state with other senses, glittering cities, theme parks, golf courses, zoological gardens, Research Triangle Park, universities, the historic Outer Banks, Virginia Dare's birthplace, Battleship North Carolina and the place where our first plane flew.

"North Carolina: Mineral State, U.S.A." - This is an excellent study of the mineral resources of a typical American region. Viewers see that sand and gravel mining is more rewarding than gold. They can watch mining reclamation programs resulting in beautiful golf courses, baseball fields, parks and lakes. More than 300 varieties of rocks and minerals are mined in this area - feldspar, lithium, mica, olivine, phosphates, clay, gold and other metals - and precious gems like emeralds. Virtually every one of the state's 100 counties is an important mineral producer.

"A Good Start" - In the first months of a baby's life, the most important ways to express love come at feeding time. There are options for infant feeding: breastfeeding, bottle feeding or a combination of both, and either traditional or disposable bottles. This objective and highly informative program details advantages of all systems, and demonstrates proper feeding disciplines by mother and baby. Preparations of formulas and both types of bottles are shown.

"The Keys to Success" - This is a complex and haunting program about a boy with a reading disability finding strength in learning to type with his peers in school. There are human and educational messages here that can provide important aid to parents and teachers with children who have reading and writing problems. The typewriter learnig process is depicted in a new light that could be valuable in adults involved with hyperactive, dyslexic or highly intelligent children.

"The Calculator Goes to School" - A remarkable report on a revolution created by the broad use of hand calculators in the nation's public schools, this unique program visits a number of American schools to watch students come alive in their math classes. Teachers, too, come alive as they are instructed by their peers in the proper use of calculators in classrooms and they lose their apprehensions as their students gain number sense and lose their fears of wrong answers. The students, from kindergarten to high school, are entrancing as they make friends with little calculators and take giant steps into math that their teachers never thought possible.

"Young People in Sports" - What drives a teen to swim endless laps? Why does a youngster accept sweat and heartbreaks to keep playing football? Sports are priceless for young people and this is the program that proves it! Long after the winning or losing scores are forgotten, Americans are better for the team feeling, positive mental attitude, acceptance of discipline, and exultation from accomplishment they learned in sports as young people. Sports teaches them about competition, about defeat as well as victory, about making decisions and living with them, about goals and aspirations, about good relationships with family, friends, competitors and coaches.

"Facing Facts" - There are countless myths surrounding the cause and treatment of acne and they usually stand in the way of teenagers ending their acne problems. "Facing Facts" objectively documents the problems and the solutions. Millions of teen students will welcome this excellent program that will give them peace of mind about their acne.

"This Dog Is Real" - Young Lucy collects toy dogs - china dogs, fur dogs, wooden dogs. Then her family decides to buy a real dog. They go about it carefully, thoughtfully. They look for a good match among breed, owner, and life style. The children are taught how to treat the puppy. The family discusses responsibilities of each person. Feeding, housetraining and record-keeping are covered. We see the services of the veterinarian and obedience trainer.

"There's Trouble Underfoot" - Consumer's save substantial money and their carept by cleaning their own floor covering. How I do that neatly and successfully is the subject of this program. Homeowners learn about the three methods: shampoo, steam and dry cleaning. They find out how to establish a daily vacuuming regimen.

"The World At Your Feet" - Lee Kolker, nationally recognized carpet stylist, floods this valuable consumer program with facts and wisdom on buying and using carpet smartly. This is instant education in design, construction, color, resilience, wear, stain resistance, soil resistance, texture retention, cleaning, cost, fire safety, backing and function. This program should be seen before anyone buys carpet for a home.

"Consumer's Credit Quiz" - Don Wescott puts credit experts before a public audience to answer their tough and vital consumer questions about credit bureaus, late payments, establishing credit, whether open-account credit is costly, and where to get free credit. Viewers learn how to shop for the most favorable credit terms, and how to stay out of credit trouble.

"The Natural LP Gas Energy Quiz" - LP gas isn't new, isn't hidden and certainly isn't in short supply. But few people know much about this American energy treasure. Good questions get good answers in this highly informative program excursion into the world of liquified petroleum gas. Sixty million Americans already use this fuel, not just in their homes, but for energy on farms, in trucks and in factors. Viewers get a chance to compare LP gas with electricity, natural gas, fuel oil and coal. They learn about the heating and cleanliness properties of LP gas.

"Consumer's Guide to Automotive Maintenance" - In this time of squeezing the most value from every car, this invaluable program comes to answer a crying need. You do not need to be a mechanic to check your car and keep it running longer and free of costly trouble. Viewers learn how to perform checks...How to change oil, filter, brake belts, muffler...How to track down leaks, check tires, wheels, alignment, and shocks.

"Family Financial Success" - No one escapes inflation. Here viewers get valuable counsel on reckoning with inflation and using it in family financial planning.

They are shown the wisdom of regular financial checkups, like physicals. They learn how to use the services of financial professionals. There is a difference between planning and bookkeeping - the importance of budgeting versus the notation of money already spent. Family burrowing is put in its proper perspective.

"How to Manage Your Money" - At today's prices, raising a child to age 18 costs $75,000. That comes to $4,200 a year. A four-year college education may run more than $30,000. Television network commentator Martin Agronsky and a panel of certified public accountants take the viewer through steps which will lead to a greater degree of financial security. They show how to beat inflation, how to create a flexible budget, how to improve financial stability and how to add 20 percent to one's buying power.

"You Never Miss the Water" - American's want and need to save money on their water bills. This program tells them how. Viewers quickly learn exactly how they can cut water use in every sink in their homes by 50 percent without any change in its flow. The program reveals how to save more than 2,000 gallons of shower water every year, and 20,000 gallons per year with each water closet.

"Fire on the Rise" - With more misunderstanding prevalent than wisdom about high-rise fires, this superb motion program arrives none too soon. A New York fire commissioner gives an analysis of the right ways to save lives and property is high-rise fires. Viewers see newest techniques and hardware for containment of these unique fires and learn how to handle themselves correctly.

"Open and Shut Case" - Consumers remain ignorant about the merits and features of garage door openers and yet they either spend important dollars for them, or continue to break their backs hand-operating their old doors. This consumer's guide to garage door openers entertains while it educates viewers in garage door cost, installation, power, security, fire protection, carbon monoxide protection, and safety.

"Taken for Granted" - Elevators are one of the world's safest methods of transportation. This unique elevator safety program helps us keep it that way. Why can't an elevator fall? What do you do if it stalls? In case of fire, do you take an elevator? What are the safe ways to ride an escalator? When do you push the stop button?

"Second Chance" - Everyone who goes through a fire also goes through 20-20 hindsight. He asks himself what he could have done to avoid the tragedy, the agony, the massive disruption to his life. He is amazed that it may take only six minutes to lose everything he owns and often the people he loves. This program instructs viewers on escape planning, fire protection and control, kitchen discipline, electrical responsibility, what extinguishers to buy, where to place them, how to operate them, and how to maintain them.

"How Industry Conserves Energy" - 21st century scholars look back on late 20th century industrial American to see how they coped with their energy crisis. They note that industry faced conservation, efficiency and ingenuity to win its battle. Viewers watch the latest technology in insulation, electronic controls, steam traps, recycling heat, electric motors, industrial lighting - and work toward exciting new energy system concepts.

"Puppet on a String" - Batteries free society from the tangle of electrical cords. Our dependence on electricity need not anchor use and enslave us to the nearest 110 outlet. Battery power gives us mobility in the use of our calculators, flashlights, vehicles, toys, radio and TV, power tools, cameras, watches, hearing aids, walkie-talkies and security alarms. "Puppet on a String" provides instant consumer education on how to buy batters for each use. Viewers learn what batteries to buy, how to store them, and what to expect of them. They find out about battery safety and convenience, and the surprising diversity of batteries.

"America's Soil - The Eroding Foundation" - This program, narrated by Eddie Albert, discusses soil erosion...problems and possible solutions.

"The Women in Sports - Records, Rewards, Heroines" - This documentary is an historic and motivational program for women not currently involved in sports activities. Viewers see the evolution of women in sports as Donna DeVarona narrates. They witness exciting coverage of the famous New York Mini-Marathon where 5,800 women compete. Women are shown competing and excelling in swimming, basketball, golf, gymnastics, skating, skiing, auto racing, tennis and softball. Their planned physical activity reaps benefits beyond body improvement. Fatigue fades and nervousness disappears. Women achieve psychological relation, confidence, stamina, coordination, strength and emotional control.

"The Women in Sports - Get Up, Get Out, Get Going!" - This program provides superb motivation to women who until now have kidded themselves into thinking they are exercising. In half an hour viewers turn from passive observers to enthusiastic people who are ready to get up, get out and get going! We find Beth almost a hopeless cause, disgusted at her own pathetic exercise program. She's 25 and looks 50. Then she learns to face herself - as a child and as an adult - and to face real commitment to active sports. She comes to understand meditation, competition, concentration, coordination and cooperation as essential to here success. Produced in cooperation with the Women's Sports Foundation.

"Questions Most Frequently Asked" - People are scared to death of death, so many are suspicious of funeral directors and hesitate to ask questions that bother them: "Why do we have funerals anyway? Do we need to carry on so, almost worshipping the body? Wouldn't it be nicer to hold services at the house instead of a funeral home? What should and do funerals cost? Why have an expensive vault? With land shortage, shouldn't we cremate? Why is embalming so important? Should children attend funerals?

"National Bible Quiz" - How old is the Bible? In what language was it originally written? When and where did the first printed Bible appear? How many languages are there today? Well, there are 3,000 languages and the Bible has already been translated into 1,600 of them. Viewers are treated to a colorful variety of questions and suprising answers in this objective, non-sectarian quiz about the scriptures.

"How Cities Slash Spending, Parts I and II" - City dwellers are demanding that their governments stop wasting their tax dollars. Cities are hard-pressed to deliver needed services on sharply limited funds. This unique program's detail case histories all over America where cities succeed in continuing - even improving - municipal services on less money. Viewers see how funds are stretched in lighting, grounds maintenance, record keeping, signs, computers, energy control, fire security, sewage system upkeep, water distribution, industrial wastes, sanitation containers and trucks, and water meters.

"The History of Tea" - This program takes the viewer from ancient legend through historic fact. Pleasant animation, colorful reenactments, and scenes shot in East Africa, England, South Carolina and New Jersey bring together the cultivation, processing, blending, tasting and marketing of the world's most popular drink.

"The Women in Sports - Reflections of the Champions" - Here is a rare insight into the phenomenon of the woman in sports. The cinema verite camera observes and witnesses special moments in the lives of great women athletes: Janet Guthrie at the racetracks, Micki King Hogue at diving practice, Wyomia Tyrus at the track, Diana Kallian at softball practice, Cathy Rigby at her gymnastics camp, Cathy Rush at her basketball camp, Sheila Young at Lake Placid, and Eva Auchincloss at the Women's Sports Foundation. They all indicate that regardless of a woman's sports background or age, it's never too late to begin. They answer intriguing questions: How does it feel to come out second? What sport is not for women? When will you give up sports? Were you a well-coordinated child? What motivates you to work out? Do you have fun?

"You and ME" - Careers in engineering get a solid piece of reportage in this lush new program. Some of America's largest engineering projects and some of the nation's foremost mechanical engineers are shown. Noted engineers reveal how they prepared themselves for their careers while still in school, and how that training paid off. Young people can get a good sense of the many faces of the engineering professions from watching this one program, so they can make valid career decisions.

"In His Father's Footsteps" - There is a sting in this program about bigotry that is catching millions of Americas unaware. U.S. armed forced who fought in World War II learned first hand of the racial hatred of the Nazis. But did their feeling against Germans spill over into the next generation, and was it any more justified? Is human hatred ever justified? This outstanding program haunts every audience. It motivates viewers to examine themselves for prejudice and to think in terms of brotherhood and sisterhood.

PROBLEM SOLVING (30 Min.)

Audience:	Junior High and Senior High
Produced By:	WCVE-TV

PROBLEM SOLVING helps students to learn how to identify [illegible]lems and use problem solving techniques -- including environmental problems, [illegible]ents rights and responsibilities, futurism, community problems, business and career concerns, personal finance and peer group pressures.

"Groups" - Discusses peer groups as they relate positively or negatively to personal problem solving. Presents professional problem solvers discussing the role of imagination in creative problem solving.

"Contemporary" - Pictures computers and their use as problem solvers. Gives the advantages of using a computer to perform mathematical computations. Reveals the role of computers in the space program.

"The Future" - Expresses student feelings and concerns about problems of the future as identified in a poll and through a high school panel. Studies critical reading skills by looking at The Ufonauts, by Hans Holzer.

"Rights and Responsibilities" - Discusses the relationship between citizen rights and student rights. Discusses student rights and responsibilities at school. Gives problems encountered by elected student officers. Reviews the book, Due To Circumstances Beyond Our Control, by Fred Friendly.

RAISIN' UP! (30 Min.)

Audience: Kindergarten and Primary
Produced By: WHRO-TV

RAISIN' UP portrays the basic food groups and the contributions that food makes to health and growth. It uses dance, drama, puppetry, mime and music.

"Priscilla" - Relates how stubborn Priscilla finally learns that nutritious foods are necessary for growth and health, and that there is no one miracle food. Presents the basic four food groups and the necessity of eating a variety of foods from them everyday.

"Carlisle, The Mouse" - Develops an understanding that milk products are an important part of diet. Presents a variety of milk products, their sources and their preparation processes. Details the use the body makes of milk and the need for consuming three servings a day from the milk group.

"The Great Meat Robbery" - Develops an understanding that meat is important in the diet for growth, development and repair to the body. Presents a variety of items from the meat group, meat alternatives and ways meat can be prepared.

"Grendel's Magic Garden" - Presents a variety of items from the fruit/vegetable groups; ways they may be prepared and how they help the body.

"Charlie Risenloaf" - Presents a variety of items from the bread/cereal groups; ways bread and cereal can be prepared and the body's need for four servings each day.

"Tommy Nutrition" - Explains the six basic nutrients and tells of their main function in the body. States the importance of having a balanced breakfast daily. Identifies a variety of foods and cites the main nutriets they supply to the body.

"From Tractor to Tray" - Identifies a variety of sources of man's foods. Relates why we need to eat a nutritious lunch. Assesses the value of a meal according to the basic four food groups.

"The Super Snack" - Identifies a variety of foods, classifies the foods into the basic four food groups and cites the main nutrients the foods supply the body. States two reasons why nutritious snacks should be eaten rather than junk food.

"Dinner Bells" - Explains why we need to eat a nutritious dinner daily. Cites two reasons for a person's food choices and explains that preparation methods may differ among a variety of cultures.

"To Market" - Illustrates how to locate and classify nutritious foods found in a supermarket into the four food groups. Explains how to read the label on a product, list the three main ingredients in the product and state the product's weight.

RIGHTS AND RESPONSIBILITIES (30 Min.)

Audience:	Junior High and Senior High
Produced By:	WHRO-TV

RIGHTS AND RESPONSIBILITIES presents citizenship for today's youth with an emphasis on privileges inherent in the law. The student considers his rights and responsibilities in the school, in the working world as a part of the business community, in the local community and in society as a whole.

"Dead Path" - Describes Larry's arrest for common law burglary, his transfer to the city jail and how he felt during his stay.

"Change" - Shows how Larry changed from a person full of bitterness and hate to a rehabilitated young man ready to live in a free society. Tells that he makes a sincere plea for others to avoid crime and thereby avoid his mistakes.

"Police Officer" - Follows two plainclothes detectives acting in the capacity of truant officers as they cruise the city and record their daily encounters with juveniles.

"An Open Mind" - Presents the uniformed police officer and his rights and responsibilities in enforcing the law in relation to juveniles.

"In School, Part I" - Presents issues concerning the rights of students with court cases from the early 1900's to the present. Gives opinions by an administrator, teachers and students on truancy, due process and corporal punishment.

"In School, Part II" - Deals with the issues of smoking - including marijuana - assult, dress, privacy of lockers, student records, vandalism and anti-authoritarian attitudes.

"At Work" - Shows four young people at work. Includes an apprentice welder, a machinist, a photo offset trainee and a young man who has held many different jobs. Allows all to express their feelings and tell of their experiences in the working world.

"Sign Here" - Presents types of contracts - contracts and minors, implications of being 18, credit and commercial employment contracts, wage garnishment and the marriage contract.

"The Voting Machine" - Interest students and young adults in participating in their governments.

THINKABOUT (20 Min.)

Audience: Elementary
Produced By: AIT

THINKABOUT illustrates how others solve curricula and non-school problems. Stimulates discussion about problem solving and the application of skills. Motivates students to problem solving. Endeavors to help upper elementary students become independent learners.

"Approximating" - Introduces approximating as a process of comparison using a referent. Discusses why there may be variance in what is an acceptable approximation.

"Using Estimating and Approximating" - Brings estimation and approximation together. Shows a class deciding if they should estimate, approximate or do both.

"Find Your Guide" - Offers a general four step approach to problem solving.

"What's The Meaning?" - Illustrates that communication involves a sender, a receiver and information. Depicts situations in which meaning is not shared.

"Meaning is More Than Words" - Considers fact-to-face communication. Shows how emphasis, intonation, nonverbal behavior, context and pauses influence the meaning the receiver gets.

"Remember The Audience" - Deals with one-way communication. Demonstrates that a sender must consider the receiver if his meaning is to be conveyed accurately.

"But, What Does It Mean?" - Illustrates how a receiver of a one-way communication can find the sender's meaning through questioning and discussion.

"The Bigger Picture" - Deals with context. Demonstrates how it is sometimes necessary to go beyond the information in a message to understand the meaning of the sender.

"Where Are You Coming From?" - Illustrates how differences in background and experience influence the meaning people get from information. Shows how identical information can be interpreted in different ways.

"Make A Present For The Future" - Strives to stimulate a classroom activity similar to the one in the program. Shows children making a time capsule.

"What Do I Know?" - Centers on information gathering. Helps students establish a definite purpose for the information that they may collect.

"Where Should I Go" - Helps students consider what sources of information are appropriate for their purposes.

"What Should I Do" - Introduces strategies such as observing, interviewing and experimenting. Helps students consider which are appropriate to their needs.

"Ways To Remember" - Provides suggestions on memory. Illustrates using sentence clues.

Week of September 19

MORNING

FALL '83

MONDAY 19	TUESDAY 20	WEDNESDAY 21	THURSDAY 22	FRIDAY 23
8:00 Imagine That "You Are Something Else" 8:20 Thinkabout "Estimating" 8:40 Inside Out "Can Do - Can't Do" 9:00 Cast Your Own Shadow "Forestry" 9:30 Close Up I 10:00 Humanities "Battle Born-MX in Nevada" 11:00 Modern Video Programs "The Last Drop" "Souvenirs" "Patterns of Play"	8:00 Imagine That "You Are Something Else" 8:20 Thinkabout "Approximating" 8:40 Inside Out "Breakup" 9:00 Cast Your Own Shadow "Secretaries, Clerk Typist" 9:30 Close Up I 10:00 Humanities "Refugee Road" 11:00 Modern Video Programs "Your Future in Art-A Career for the 80s" "Future Funds" "NY-NJ USA" "Spire to the Sky"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams 9:00 Dealing with Cultural Differencies in the Classroom Dr. Carlton E. Brown 10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak 11:00 NASA Presents "Apollo 4 Mission" "Debrief: Apollo 8" "The Flight of Apollo 7"	8:00 Raisin' Up! "Great Meat Robbery" "Grendel's Magic Garden" 8:30 Rights and Responsibilities "Dead Path" 9:00 Close Up II 9:30 Modern Video Shorts "The Hospital, The Surgeon and You" "A Word to the Wise" 10:00 The People's Potpourri "Executive Productivity" "Wings and Wheels" "Traveler's Cheques: A Safer Way" "The Right Move" 11:00 Modern Video Programs "Sugar Mountain Blues" "A Home for Osmar" "Let's Do This More Often"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams 9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown 10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak 11:00 NASA Presents "Apollo 4 Mission" "Debrief: Apollo 8" "The Flight of Apollo 7

Week of September 19

EVENING

FALL '83

MONDAY 19	TUESDAY 20	WEDNESDAY 21	THURSDAY 22	FRIDAY 23
6:30 Of Public Interest 7:00 Imagine That "You Are Somewhere Else" 7:20 Thinkabout "Approximating" 7:40 Inside Out "Breakup" 8:00 Cast Your Own Shadow "Secretaries, Clerk Typist" 8:30 Close Up I 9:00 Humanities "Refugee Road" 10:00 Modern Video Programs "Your Future in Art-A Career for the 80s" "Future Funds" "NY-NJ USA" "Spire to the Sky"	6:30 The Human Condition 7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams 8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown 9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak 10:00 NASA Presents "Apollo 4 Mission" "Debrief: Apollo 8" "The Flight of Apollo 7"	6:30 Focus 7:00 Raisin' Up! "Great Meat Robbery" "Grendel's Magic Garden" 7:30 Rights and Responsibilities "Dead Path" 8:00 Close Up II 8:30 Modern Video Shorts "The Hospital, the Surgeon and You" "A Word to the Wise" 9:00 The People's Potpourri "Executive Productivity" "Wings and Wheels" "Traveler's Cheques: A Safer Way" "The Right Move" 10:00 Modern Video Programs "Sugar Mountain Blues" "A Home for Osmar" "Let's Do This More Often"	6:30 The Human Condition 7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams 3:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown 9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak 10:00 NASA Presents "Apollo 4 Mission" "Debrief: Apollo 8" "The Flight of Apollo 7"	6:30 Of Public Interest 7:00 Imagine That "You Are Somewhere Else" 7:20 Thinkabout "Approximating" 7:40 Inside Out "Breakup" 8:00 Cast Your Own Shadow "Secretaries, Clerk Typist" 8:30 Close Up I 9:00 Humanities "Refugee Road" 10:00 Modern Video Programs "Your Future in Art-A Career for the 80s" "Future Funds" "NY-NJ USA" "Spire to the Sky"

FALL '83

Week of September 26

MORNING

MONDAY 26	TUESDAY 27	WEDNESDAY 28	THURSDAY 29	FRIDAY 30
8:00 Imagine That "You Are Somewhere Else"	8:00 Imagine That "You Made Some Other Noise"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	8:00 Raisin' Up "Charlie Risenloaf" "Tommy Nutrition"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams
8:20 Thinkabout "Approximating"	8:20 Thinkabout "Using Estimating And Approximating"		8:30 Rights and Responsibilities "Change"	
8:40 Inside Out "Breakup"	8:40 Inside Out "Love Susan"			
9:00 Cast Your Own Shadow "Secretaries, Clerk Typist"	9:00 Cast Your Own Shadow "Construction"	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	9:00 Close Up II	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown
9:30 Close Up I	9:30 Close Up I		9:30 Modern Video Shorts "Running Hard...Breathing Easy" "Sesame Place	
10:00 Humanities "Refugee Road"	10:00 Humanities "Doin' Life"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	10:00 The People's Potpourri "A Working Solution" "A Whole New Image" "The Beautiful Balloon Ride" "North Carolina: Mineral State USA"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak
11:00 Modern Video Programs "Your Future in Art-A Career for the 80's" "Future Funds" "NY-NJ USA" "Sprite to the Sky"	11:00 Modern Video Programs "Get Out Alive" "Silver Linings"	11:00 NASA Presents "Apollo 9:The Space Duet of Spider and Gumdrop" "Apollo 10:Green Light for Lunar Landing" "America's Wings"	11:00 Modern Video Programs "A Gathering of Minds" "The Eternal Light" "The Cancer Dragon" "Snowshoe Priest"	11:00 NASA Presents "Apollo 9:The Space Duet of Spider and Gumdrop" "Apollo 10:Green Light for Lunar Landing" "America's Wings"

FALL '83

Week of September 26

EVENING

MONDAY 26	TUESDAY 27	WEDNESDAY 28	THURSDAY 29	FRIDAY 30
6:30 Of Public Interest	6:30 The Human Condition	6:30 Focus	6:30 The Human Condition	6:30 Of Public Interest
7:00 Imagine That "You Made Some Other Noise"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Raisin' Up! "Charlie Risenloaf" "Tommy Nutrition"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Imagine That "You Made Some Other Noise"
7:20 Thinkabout "Using Estimating And Approximating"		7:30 Rights and Responsibilities "Change"		7:20 Thinkabout Using Estimating And Approximating
7:40 Inside Out "Love Susan"				7:40 Inside Out Love Susan"
8:00 Cast Your Own Shadow "Construction"	8:00 Dealing With Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Close Up II	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Cast Your Own Shadow "Construction"
8:30 Close Up I		8:30 Modern Video Shorts "Running Hard..Breathing Easy" "Sesame Place"		8:30 Close Up I
9:00 Humanities "Doin' Life"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 The People's Potpourri "A Working Solution" "A Whole New Image" "The Beautiful Baloon Ride" "North Carolina: Mineral State USA"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 Humanities "Doin' Life"
10:00 Modern Video Programs "Get Out Alive" "Silver Linings"	10:00 NASA Presents "Apollo 9:The Space Duet of Spider and Gumdrop" "Apollo 10:Green Light for Lunar Landing" "America's Wings"	10:00 Modern Video Programs "A Gathering of Minds" "The Eternal Light" "The Cancer Dragon" "Snowshoe Priest"	10:00 NASA Presents "Apollo 9:The Space Duet of Spider and Gumdrop" "Apollo 10:Green Light for Lunar Landing" "America's Wings"	10:00 Modern Video Programs "Get Out Alive" "Silver Linings"

FALL '83

Week of October 3

MORNING

MONDAY 3	TUESDAY 4	WEDNESDAY 5	THURSDAY 6	FRIDAY 7
8:00 Imagine That "You Made Some Other Noise"	8:00 Imagine That "You Are a Zoo Animal"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	8:00 Raisin' Up! "Tractor to Tray" "Super Snack Party"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams
8:20 Thinkabout "Using Estimating and Approximating"	8:20 Thinkabout "Find Your Guide"		8:30 Rights and Responsibilities "An Interview With Larry"	
8:40 Inside Out "Love Susan"	8:40 Inside Out "Brothers and Sisters"			
9:00 Cast Your Own Shadow "Construction"	9:00 Cast Your Own Shadow "Law Enforcement"	9:00 Dealing With Cultural Differences in the Classroom Dr. Carlton E. Brown	9:00 Close Up II	9:00 Dealing With Cultural Differences in the Classroom Dr. Carlton E. Brown
9:30 Close Up I	9:30 Close Up I		9:30 Modern Video Shorts "Partners" "Sight Restoration	
10:00 Humanities "Doin' Life"	10:00 Humanities "Subsistence - Our Way of Life is Dying" "Saltwater People"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	10:00 The People's Potpourri "A Good Start" "The Keys to Success" "The Calculator Goes to School"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Vernonica Nowak
11:00 Modern Video Programs "Get Out Alive" "Silver Linings"	11:00 Modern Video Programs "Noah Was an Amateur" "C'mon Along America.. There's a Better Way to Go, Take a Motorcoach Tour!" "Running Hard, Breathing Easy"	11:00 NASA Presents "Apollo 12: Pinpoint for Science" "Where Dreams Come True"	11:00 Modern Video Programs "Food, Glorious Food" "Partners" "The Bionic Ear" "From Field to Table.."	11:00 NASA Presents "Apollo 12: Pinpoint for Science" "Where Dreams Come True"

Week of October 3

FALL '83

EVENING

MONDAY 3	TUESDAY 4	WEDNESDAY 5	THURSDAY 6	FRIDAY 7
6:30 Of Public Interest	6:30 The Human Condition	6:30 Focus	6:30 The Human Condition	6:30 Of Public Interest
7:00 Imagine That "You Are A Zoo Animal"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Raisin' Up! "Tractor to Tray" "Super Snack Party"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Imagine That "You Are A Zoo Animal"
7:20 Thinkabout "Find Your Guide"		7:30 Rights and Responsibilities "An Interview with Larry"		7:20 Thinkabout "Find Your Guide"
7:40 Inside Out "Brothers and Sisters"				7:40 Inside Out "Brothers and Sisters"
8:00 Cast Your Own Shadow "Law Enforcement"	8:00 Dealing with Cultural Differences in the Classroom Dr. Calton E. Brown	8:00 Close Up II	8:00 Dealing with Cultural Differences in the Classroom Dr. Calton E. Brown	8:00 Cast Your Own Shadow "Law Enforcement"
8:30 Close Up I		8:30 Modern Vdeo Shorts "Partners" "Sight Restoration"		8:30 Close Up I
9:00 Humanities "Subsistence - Our Way of Life is Dying" "Saltwater People"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 The People's Potpourri "A Good Start" "The Keys to Success" "The Calculator Goes to School"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 Humanities "Subsistence - Our Way of Life is Dying" "Saltwater People"
10:00 Modern Video Programs "Noah Was an Amateur" "C'mon Along America.. There's A Better Way to Go, Take a Motorcoach Tour!" "Running Hard...Breath-Easy"	10:00 NASA Presents "Apollo 12: Pinpoint for Science" "Where Dreams Come True"	10:00 Modern Video Programs "Food Glorious Food" "Partners" "The Bionic Ear" "From Field to Table"	10:00 NASA Presents "Apollo 12: Pinpoint for Science" "Where Dreams Come True"	10:00 Modern Video Programs "Noah Was An Amateur" "C'Mon Along America.. There's a Better Way to Go, Take a Motorcoach Tour!" "Running Hard...Breathing Easy"

FALL '83

Week of October 10

MORNING

MONDAY 10	TUESDAY 11	WEDNESDAY 12	THURSDAY 13	FRIDAY 14
8:00 Imagine That "You Are A Zoo Animal"	8:00 Imagine That "You Have A Favorite Partner"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	8:00 Raisin' Up!" "Dinner Bells" "Market to Market"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams
8:20 Thinkabout "Find Your Guide"	8:20 Thinkabout "What's the Meaning?"		8:30 Rights and Responsibilities "Police Officer"	
8:40 Inside Out "Brothers and Sisters"	8:30 Inside Out "Someone Special"			
9:00 Cast Your Own Shadow "Law Enforcement"	9:00 Cast Your Own Shadow "Fast Foods"	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	9:00 Close Up II	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown
9:30 Close Up I	9:30 Close Up I		9:30 Modern Video Shorts "Images of Knowing" "Some Children Need Special Care"	
10:00 Humanities "Subsistence - Our Way of Life is Dying" "Saltwater People"	10:00 Humanities "American Images"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	10:00 The People's Potpourri "Young People in Sports" "Facing Facts" "This Dog is Real"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak
11:00 Modern Video Programs "Noah Was an Amateur" "C'mon Along America.. There's a Better Way to Go, Take a Motorcoach Tour!" "Running Hard, Breathing Easy"	11:00 Modern Video Programs "Some Children Need Special Care" "Portrait of the Enemy" "Portrait of a Killer" "Spring Quartet"	11:00 NASA Presents "Apollo 13: Houston, We've Got a Problem" "Apollo 14: A Visit to Fra Mauro"	11:00 Modern Video Programs "Shiko Munakata - Master of Woodblock Print" "Three Encounters with Japan"	11:00 NASA Presents "Apollo 13: Houston, We've Got a Problem" "Apollo 14: A Visit to Fra Mauro"

FALL '83

Week of October 10

EVENING

MONDAY 10	TUESDAY 11	WEDNESDAY 12	THURSDAY 13	FRIDAY 14
6:30 Of Public Interest	6:30 The Human Condition	6:30 Focus	6:30 The Human Condition	6:30 Of Public Interest
7:00 Image That "You Have A Favorite Partner"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Raisin' Up! "Dinner Bells" "Market to Market"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Imagine That "You Have A Favorite Partner"
7:20 Thinkabout "What's the Meaning?"		7:30 Rights and Responsibilities "Changes"		7:20 Thinkabout "What's the Meaning?"
7:30 Inside Out "Someone Special"				7:30 Inside Out "Someone Special"
8:00 Cast Your Own Shadow "Fast Foods"	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Close Up II	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Cast Your Own Shadow "Fast Foods"
8:30 Close Up I		8:30 Modern Video Shorts "Images of Knowing" "Some Children Need Special Care"		8:30 Close Up I
9:00 Humanities "American Images"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 The People's Potpourri "Young People in Sports" "Facing Facts" "This Dog is Real"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 Humanities "American Images"
10:00 Modern Video Programs "Some Children Need Special Care" "Portrait of the Enemy" "Portrait of a Killer" "Spring Quartet"	10:00 NASA Presents "Apollo 13: Houston, We've Got a Problem" "Apollo 14: A Visit to Fra Mauro"	11:00 Modern Video Programs "Shiko Munakata-Master of Woodblock Print" "Three Encounters with Japan"	10:00 NASA Presents "Apollo 13: Houston, We've Got a Problem" "Apollo 14: A Visit to Fra Mauro"	10:00 Modern Video Programs "Some Children Need Special Care" "Portrait of the Enemy" "Portrait of a Killer" "Spring Quartet"

FALL '83

Week of October 17

MORNING

MONDAY 17	TUESDAY 18	WEDNESDAY 19	THURSDAY 20	FRIDAY 21
8:00 Imagine That "You Have a Favorite Partner" 8:20 Thinkabout "What's the Meaning?" 8:30 Inside Out "Someone Special"	8:00 Imagine That "You Have a Little Friend" 8:20 Thinkabout "Meaning Is More Than Words" 8:30 Inside Out "I Want To"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	8:00 Art Cart "Painting" "Printing" 8:20 Rights and Responsibilities "An Open Mind"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams
9:00 Cast Your Own Shadow "Fast Foods" 9:30 Close Up I	9:00 Cast Your Own Shadow "How to Start Your Own Business" 9:30 Close Up I	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	9:00 Close Up II 9:30 Modern Video Shorts "Moscow" "Evening Entertainment"	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown
10:00 Humanities "American Images"	10:00 Humanities "Rosebud to Dallas"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	10:00 The People's Potpourri "There's Trouble Underfoot" "The World at Your Feet" "Consumer's Credit Quiz"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak
11:00 Modern Video Programs "Some Children Need Special Care" "Portrait of the Enemy" "Portrait of a Killer" "Spring Quartet"	11:00 Modern Video Programs "Man and His Gold" "All the Queen's Horses" "The Wonders of Wheat"	11:00 NASA Presents "Apollo 15: In The Mountains of the Moon" "Apollo 16: Nothing So Hidden"	11:00 Modern Video Programs "Crafts of Edo" Narrative Picture Scrolls"	11:00 NASA Presents "Apollo 15: In The Mountains of the Moon" "Apollo 16: Nothing So Hidden"

FALL '83

Week of October 17

EVENING

MONDAY 17	TUESDAY 18	WEDNESDAY 19	THURSDAY 20	FRIDAY 21
6:30 Of Public Interest	6:30 The Human Condition	6:30 Focus	6:30 The Human Condition	6:30 Of Public Interest
7:00 Imagine That "You Have a Little Friend" 7:20 Thinkabout "Meaning Is More Than Words" 7:30 Inside Out "I Want To"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Art Cart "Painting" "Printing" 7:30 Rights and Responsibilities "An Open Mind"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Imagine That "You Have a Little Friend" 7:30 Thinkabout "Meaning Is More Than Words" 7:30 Inside Out "I Want To"
8:00 Cast Your Own Shadow "How to Start Your Own Business" 8:30 Close Up I	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Close Up II 8:30 Modern Video Shorts "Moscow" "Evening Entertainment"	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Cast Your Own Shadow "How to Start Your Own Business" 8:30 Close Up I
9:00 Humanities "Rosebud to Dallas"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 The People's Potpourri "There's Trouble Underfoot" "The World at Your Feet" "Consumer's Credit Quiz"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 Humanities "Rosebud to Dallas"
10:00 Modern Video Programs "Man and His Gold" "All the Queen's Horses" "The Wonders of Wheat"	10:00 NASA Presents "Apollo 15: In The Mountains of the Moon" "Apollo 16: Nothing So Hidden"	10:00 Modern Video Programs "Crafts of Edo" "Narrative Picture Scrolls"	10:00 NASA Presents "Apollo 15: In The Mountains of the Moon" "Apollo 16: Nothing So Hidden"	10:00 Modern Video Programs "Man and His Gold" "All the Queen's Horses" "The Wonders of Wheat"

FALL '83

Week of October 24

MORNING

MONDAY 24	TUESDAY 25	WEDNESDAY 26	THURSDAY 27	FRIDAY 28
8:00 Imagine That "You Have a Little Friend"	8:00 Imagine That "You Are in Outer Space"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	8:00 Art Cart "Weaving" "Collage"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams
8:20 Thinkabout "Meaning is More than Words"	8:20 Thinkabout "Remember the Audience"			
8:30 Inside Out "I Want To"	8:30 Inside Out "I Want To"		8:30 Rights and Responsibilities "In School-Part I"	
9:00 Cast Your Own Shadow "How to Start Your Own Business"	9:00 Cast Your Own Shadow "The Ministry"	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	9:00 Close Up II	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown
9:30 Close Up I	9:30 Close Up I		9:30 Modern Video Shorts "Making Things" "A Portrait of Power"	
10:00 Humanities "Rosebud to Dallas"	10:00 Humanities "The Earth is Our Home" "Apache Wars"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	10:00 The People's Potpourri "The Natural LP Gas Energy Quiz" "Consumer's Guide to Automotive Maintenance"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak
11:00 Modern Video Programs "Man and His Gold" "All the Queen's Horses" "The Wonders of Wheat"	11:00 Modern Video Programs "The Hauge, A Monument" "The Fellows" "The Best is Yet to Be"	11:00 NASA Presents "Apollo 17: On the Shoulders of Giants" "Zero-G" "Magnetism in Space"	11:00 Modern Video Programs "Corner of the World" "They Shouldn't Call Iceland Iceland" "Boating Dollars Make Sense"	11:00 NASA Presents "Apollo 17: On the Shoulders of Giants" "Zero-G" "Magnetism in Space"

FALL '83

Week of October 24

EVENING

MONDAY 24	TUESDAY 25	WEDNESDAY 26	THURSDAY 27	FRIDAY 28
6:30 Of Public Interest	6:30 The Human Condition	6:30 Focus	6:30 The Human Condition	6:30 Of Public Interest
7:00 Imagine That "You Are In Outer Space"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Art Cart "Weaving" "Collage"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Imagine That "You Are In Outer Space"
7:20 Thinkabout "Remember the Audience"				7:20 Thinkabout "Remember the Audience"
7:30 Inside Out "When Is Help"		7:30 Rights and Responsibilities "In School-Part I		7:30 Inside Out "When Is Help"
8:00 Cast Your Own Shadow "The Ministry"	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Close Up II	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Cast Your Own Shadow "The Ministry"
8:30 Close Up I		8:30 Modern Video Shorts "Making Things" "A Portrait of Power"		8:30 Close Up I
9:00 Humanities "The Earth is Our Home" "Apache Wars"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 The People's Potpourri "The Natural LP Gas Energy Quiz" "Consumer's Guide to Automotive Maintenance"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 Humanities "The Earth is Our Home" "Apache Wars"
10:00 Modern Video Programs "The Hague, A Monument" "The Fellows" "The Best is Yet to Be"	10:00 NASA Presents "Apollo 17: On the Shoulders of Giants" "Zero-G" "Magnetism in Space"	10:00 Modern Video Programs "Corner of the World" "They Shouldn't Call Iceland Ice'and" "Boating Dollars Make Sense"	10:00 NASA Presents "Apollo 17: On the Shoulders of Giants" "Zero-G" "Magnetism in Space"	10:00 Modern Video Programs "The Hague, A Monument" "The Fellows" "The Best is Yet to Be"

FALL '83

Week of October 31

MORNING

MONDAY 31	TUESDAY 1	WEDNESDAY 2	THURSDAY 3	FRIDAY 4
8:00 Imagine That "You Are In Outer Space" 8:20 Thinkabout "Remember the Audience" 8:30 Inside Out "When Is Help"	8:00 Imagine That "You are Something Else" 8:20 Thinkabout "But What Does It Mean?" 8:30 Inside Out "Bully"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	8:00 Art Cart "Puppets" "Mosaics" 8:30 Rights and Responsibilities "In School-Part II	8:00 Methods and Materials for Teaching Children with Learning Problemsties Dr. Brenda T. Williams
9:00 Cast Your Own Shadow "The Ministry" 9:30 Close Up I	9:00 Cast Your Own Shadow "Computer Careers' 9:30 Close Up I	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	9:00 Close Up II 9:30 Modern Video Shorts "Siberia Invites You" "The Volga Cruise"	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown
10:00 Humanities "The Earth is Our Home" "Apache Wars"	10:00 Humanities "Stewardship of the Earth"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	10:00 The People's Potpourri "Family Financial Success" "How to Manage Your Money" "You Never Miss the Water"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak
11:00 Modern Video Programs "The Hague, A Monument" "The Fellows" "The Best Is Yet to Be"	11:00 Modern Video Programs "Nuclear Waste Isolation: A Progress Report" "Golden Harvest" "Farmers Who Bank on Themselves"	11:00 NASA Presents "Assignment: Shoot the Moon" "The Mission of Apollo Soyuz"	11:00 Modern Video Programs "Odyssey: A Quest for Energy" "Winter in Ontario" "Rolling Along"	11:00 NASA Presents "Assignment: Shoot the Moon" "The Mission of Apollo Soyuz"

FALL '83

Week of October 31

EVENING

MONDAY 31	TUESDAY 1	WEDNESDAY 2	THURSDAY 3	FRIDAY 4
6:30 Of Public Interest	6:30 The Human Condition	6:30 Focus	6:30 The Human Condition	6:30 Of Public Interest
7:00 Imagine That "You Are Something Else" 7:20 Thinkabout "But What Does It Mean" 7:30 Inside Out "Bully"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Art Cart "Puppets" "Mosaics" 7:30 Rights and Responsibilities "In School-Part II"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Imagine That "You Are Something Else" 7:20 Thinkabout "But What Does It Mean" 7:30 Inside Out "Bully"
8:00 Cast Your Own Shadow "Computer Careers" 8:30 Close Up I	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Close Up II 8:30 Modern Video Shorts "Siberia Invites You" "The Volga Cruise"	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Cast Your Own Shadow "Computer Careers" 8:30 Close Up I
9:00 Humanities "Stewardship of the Earth"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 The People's Potpourri "Family Financial Success" "How to Manage Your Money" "You Never Miss the Water"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 Humanities "Stewardship of the Earth"
10:00 Modern Video Programs "Nuclear Waste Isolation: A Progress Report" "Golden Harvest" "Farmers Who Bank on Themselves"	10:00 NASA Presents "Assignment: Shoot the Moon" "The Mission of Apollo Soyuz"	10:00 Modern Video Programs "Odyssey: A Quest for Energy" "Winter in Ontario" "Rolling Along"	10:00 NASA Presents "Assignment: Shoot the Moon" "The Mission of Apollo Soyuz"	10:00 Modern Video Programs "Nuclear Waste Isolation: A Progress Report" "Golden Harvest" "Farmers Who Bank on Themselves"

FALL '83

Week of November 7

MORNING

MONDAY 7	TUESDAY 8	WEDNESDAY 9	THURSDAY 10	FRIDAY 11
8:00 Imagine That "You Are Something Else"	8:00 Imagire That "You are Somewhere Else"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	8:00 Art Cart "Jewelry" "Paper Sculpture"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. William
8:20 Thinkabout "But What Does It Mean?"	8:20 Thinkabout "The Bigger Picture"		8:30 Rights and Responsibilities "At Work"	
8:30 Inside Out "Bully"	8:30 Inside Out "But They Might Laugh"			
9:00 Cast Your Own Shadow "Computer Careers"	9:00 Cast Your Own Shadow "Veterinarians"	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	9:00 Close Up II	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown
9:30 Close Up I	9:30 Close Up I		9:30 Modern Video Shorts "The Link Between Us... Electronics"	
10:00 Humanities "Stewardship of the Earth"	10:00 Humanities "City Visions" "Make It Bloom: The River in the Desert"	10:00 Methods and Materials for Teaching Communicative Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	10:00 The People's Potpourri "Fire on the Rise" "Open and Shut Case" "Taken for Granted"	10:00 Methods and Materials for Teaching Communicative Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak
11:00 Modern Video Programs "Nuclear Waste Isolation: A Progress Report" "Golden Harvest" "Famers Who Bank on Themselves"	11:00 Modern Video Programs "A Gathering of Minds" "The Eternal Light" "Dr. Szent-Gyorgyi and The Cancer Dragon" "Snowshoe Priest"	11:00 NASA Presents "The Flight of Faith 7" "The Four Days of Gemini 4"	11:00 Modern Video Programs "Colored Nabeshima Ware" "Kites of Japan"	11:00 NASA Presents "The Flight of Faith 7" "The Four Days of Gemini 4"

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Week of November 7

EVENING

MONDAY 7	TUESDAY 8	WEDNESDAY 9	THURSDAY 10	FRIDAY 11
6:30 Of Public Interest	6:30 The Human Condition	6:30 Focus	6:30 The Human Condition	6:30 Of Public Interest
7:00 Thinkabout "You Are Somewhere Else"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Art Cart "Jewelry" "Paper Sculpture"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Imagine That "You Are Somewhere Else"
7:20 Thinkabout "The Bigger Picture"		7:30 Rights and Responsibilities "At Work"		7:20 Thinkabout "The Bigger Picture"
7:30 Inside Out "But They Might Laugh"				7:30 Inside Out "But They Might Laugh"
8:00 Cast Your Own Shadow "Veterinarians"	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Close Up II	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Cast Your Own Shadow "Veterinarians"
8:30 Close Up I		8:30 Modern Video Shorts "The Link Between Us... Electronics"		8:30 Close Up I
9:00 Humanities "City Visions" "Make It Bloom: The River in the Desert"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 The People's Potpourri "Fire on the Rise" "Open and Shut Case" "Taken for Granted"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 Humanities "City Visions" "Make It Bloom: The River in the Desert"
10:00 Modern Video Programs "A Gathering of Minds" "The Eternal Light" "Dr. Szent-Gyorgyi and The Cancer Dragon" "Snowshoe Priest"	10:00 NASA Presents "The Flight of Faith 7" "The Four Days of Gemini 4"	10:00 Modern Video Programs "Colored Nabeshima Ware" "Kites of Japan"	10:00 NASA Presents "The Flight of Faith 7" "The Four Days of Gemini 4"	10:00 Modern Video Programs "A Gathering of Minds" "The Eternal Light" "Dr. Szent-Gyorgyi and the Cancer Dragon" "Snowshoe Priest

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Week of November 14

MORNING

MONDAY 14	TUESDAY 15	WEDNESDAY 16	THURSDAY 17	FRIDAY 18
8:00 Imagine That "You Are Somewhere Else" 8:20 Thinkabout "The Bigger Picture" 8:30 Inside Out "But They Might Laugh"	8:00 Imagine That "You Made Some Other Noise" 8:20 Thinkabout "Where Are You Coming From?" 8:30 Inside Out "Lost is a Feeling"	8:00 Methods and Materials for Teaching Children with Learning Disabilities Dr. Brenda T. Williams	8:00 Art Cart "Clay" "Crayons" 8:30 Rights and Responsibilities "Sign Here"	8:00 Methods and Materials for Teaching Children with Learning Disabilities Dr. Brenda T. Williams
9:00 Cast Your Own Shadow "Verterinarians" 9:30 Close Up I	9:00 Cast Your Own Shadow "Electronic Service Technician" 9:30 Close Up I	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	9:00 Close Up II 9:30 Modern Video Shorts "Man and His Gold"	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown
10:00 Humanities "City Visions" "Make It Bloom: The River in the Desert"	10:00 Humanities "City Visions" "Make It Bloom: The River in the Desert"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	10:00 The People's Potpourri "How Industry Conserves Energy" "Puppet on a String" "America's Soil-The Eroding Foundation"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak
11:00 Modern Video Programs "A Gathering of Minds" "The Eternal Light" "Dr. Szent-Gyorgyi and the Cancer Dragon" "Snowshoe Priest"	11:00 Modern Video Programs "Wherever You Are" "Born Again"	11:00 NASA Presents "If One Today --- Two Tomorrow" "X-Ray Spectroscopy"	11:00 Modern Video Programs "The Promise of Life" "Curse Not the Deaf"	11:00 NASA Presents "If One Today --- Two Tomorrow" "X-Ray Spectroscopy"

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Week of November 14

EVENING

MONDAY 14	TUESDAY 15	WEDNESDAY 16	THURSDAY 17	FRIDAY 18
6:30 Of Public Interest 7:00 Imagine That "You Made Some Other Noise" 7:20 Thinkabout "Where Are You Coming From?" 7:30 Inside Out "Lost is a Feeling"	6:30 The Human Condition 7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	6:30 Focus 7:00 Art Cart "Clay" "Crayons" 7:30 Rights and Responsibilities "Sign Here"	6:30 The Human Condition 7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	6:30 Of Public Interes 7:00 Imagine That "You Made Some Other Noise" 7:20 Thinkabout "Where Are You Coming From?" 7:30 Inside Out "Lost Is A Feeling"
8:00 Cast Your Own Shadow "Electronic Service Technician" 8:30 Close Up I	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E Brown	8:00 Close Up II 8:30 Modern Video Shorts "Man and His Gold"	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Cast Your Own Shadow "Electronic Service Technician" 8:30 Close Up I
9:00 Humanities "Japan-Northwest" "A Place Called Rohwer: Memories of Camp Life"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 The People's Potpourri "How Industry Conserves Energy" "Puppet on a String" "America's Soil-The Eroding Foundation"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 Humanities "Japan-Northwest" "A Place Called Rohwer: Memories of Camp Life"
10:00 Modern Video Programs "Wherever You Are" "Born Again"	10:00 NASA Presents "If One Today --- Two Tomorrow" "X-Ray Spectroscopy"	10:00 Modern Video Programs "The Promise Of Life" "Curse Not the Deaf"	10:00 NASA Presents "If One Today --- Two Tomorrow" "X-Ray Spectroscopy"	10:00 Modern Video Programs "Wherever You Are" "Born Again"

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Week of November 21

MORNING

MONDAY 21	TUESDAY 22	WEDNESDAY 23	THURSDAY 24	FRIDAY 25
8:00 Imagine That "You Made Some Other Noise"	8:00 Look "Animals"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	THANKSGIVING HOLIDAY	
8:20 Thinkabout "Where Are You Coming From?"	8:20 Thinkabout "Make A Present for the Future"			
8:30 Inside Out "Lost Is A Feeling"	8:30 Inside Out "Donna"			
9:00 Cast Your Own Shadow "Electronic Service Technician"	9:00 Cast Your Own Shadow "Social Worker"	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Bsown		
9:30 Close Up I	9:30 Close Up I			
10:00 Humanities "Japan-Northwest" "A Place Called Rhower: -Memories of Camp Life"	10:00 Humanities "Other People Make Me Feel Old" "All That I Marry"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak		
11:00 Modern Video Programs "Wherever You Are" "Born Again"	11:00 Modern Video Programs "5000 Brains" "Fishing in Northern Ontario" "Smile At Any Age"	11:00 NASA Presents "Jupiter Odyssey" "Legacy of Gemini"		

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Week of November 21

EVENING

MONDAY 21	TUESDAY 22	WEDNESDAY 23	THURSDAY 24	FRIDAY 25
6:30 Of Public Interest	6:30 The Human Condition	6:30 Focus	THANKSGIVING HOLIDAY	
7:00 Look "Animals"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Thinkabout "People Patterns". "Communication Patterns"		
7:20 Thinkabout "Make a Present for the Future"		7:30 Rights and Responsibilities "The Voting Machine"		
7:30 Inside Out "Donna"				
8:00 Cast Your Own Shadow "Social Worker"	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Close Up II		
8:30 Close Up I		8:30 Modern Video Shorts "Endless Energy"		
9:00 Humanities "Other People Make Me Feel Old" "All That I Marry"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 The People's Potpourri "The Woman in Sports-Records, Rewards, Heroines" "The Woman in Sports-Get Up, Get Out, Get Going!"		
10:00 Modern Video Programs "5000 Brains" "Fishing in Northern Ontario" "Smile At Any Age"	10:00 NASA Presents "Jupiter Odyssey" "Legacy of Gemini"	10:00 Modern Video Programs "Everything Rides on the Roads" "Seven Days of Festivale" "The Near North"		

Week of November 28

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MORNING

MONDAY 28	TUESDAY 29	WEDNESDAY 30	THURSDAY 1	FRIDAY 2
8:00 Look "Animals" 8:20 Thinkabout "Make A Present for the Future" 8:30 Inside Out "Donna"	8:00 Look "Media" 8:20 Thinkabout "What Do I Know?" 8:30 Inside Out "You Belong"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	8:00 Thinkabout "Cultural Patterns" "Nature's Patterns" 8:30 Problem Solving "Groups"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams
9:00 Cast Your Own Shadow "Social Worker" 9:30 Close Up I	9:00 Cast Your Own Shadow "Arts and Crafts as an Avocation" 9:30 Close Up I	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	9:00 Close Up II 9:30 Modern Video Shorts "Great Gardens of the World"	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown
10:00 Humanities "Other People Make Me Feel Old" "All That I Marry"	10:00 Humanities "Mountain People...A Sense of Place" "Arizona State Prison-The Writer's Workshop"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms.Corrine Droessler Ms. Veronica Nowak	10:00 The People's Potpourri "Questions Most Frequently Asked" "National Bible Quiz"	10:00 Methods and Materials for Teching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak
11:00 Modern Video Programs "3000 Brains" "Fishing in Northern Ontario" "Smile At Any Age"	11:00 Modern Video Programs "Catch Hollywood in the Act" "A Century Crystalized"	11:00 NASA Presents "Man's Reach Should Exceed His Grasp" "Planet Mars"	11:00 Modern Video Programs "A Touch of Gold" "The Empty Ark: 2002"	11:00 NASA Presents "Man's Reach Should Exceed His Grasp" "Planet Mars"

Week of November 28

FALL '83

EVENING

MONDAY 28	TUESDAY 29	WEDNESDAY 30	THURSDAY 1	FRIDAY 2
6:30 Of Public Interest	6:30 The Human Condition	6:30 Focuc	6:30 The Human Condtion	6:30 Of Public Interest
7:00 Look "Media" 7:20 Thinkabout "What Do I Know?" 7:30 Inside Out "You Belong"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Thinkabout "Cultural Patterns" "Nature's Patterns" 7:30 Problem Solving "Groups"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Look "Media" 7:20 Thinkabout "What Do I Know?" 7:30 Inside Out "You Belong"
8:00 Cast Your Own Shadow "Arts and Crafts as an Avocation" 8:30 Close Up I	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Close Up II 8:30 Modern Video Shorts "Great Gardens of the World"	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Cast Your Own Shadow "Arts and Crafts as an Avocation" 8:30 Close Up 1
9:00 Humanities "Mountain People...A Sense of Place" "Arizona State Prison-The Writer's Workshop"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 The People's Potpourri "Questions Most Frequently Asked" "National Bible Quiz"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 Humanities "Mountain People...A Sense of Place" "Arizona State Prison-The Writer's Workshop"
10:00 Modern Video Programs "Catch Hollywood in the Act" "A Century Crystalized"	10:00 NASA Presents "Man's Reach Should Exceed His Grasp" "Planet Mars"	10:00 Modern Video Programs "A Touch of Gold" "The Empty Ark: 2002"	10:00 NASA Presents "Man's Reach Should Exceed His Grasp" "Planet Mars"	10:00 Modern Video Programs "Catch Hollywood in Act" "A Century Crystalized"

FALL '83

Week of December 5

MORNING

MONDAY 5	TUESDAY 6	WEDNESDAY 7	THURSDAY 8	FRIDAY 9
8:00 Look "Media"	8:00 Look "Construction"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	8:00 Thinkabout "Search for the Unknown" "Drawing Conclusions"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams
8:20 Thinkabout "What Do I Know?"	8:20 Thinkabout "Where Should I Go?"		8:30 Problem Solving "Contemporary"	
8:30 Inside Out "You Belong"	8:30 Inside Out "Just One Place"			
9:00 Cast Your Own Shadow "Arts and Crafts as an Avocation"	9:00 Cast Your Own Shadow "Jobs for the Future"	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	9:00 Close Up II	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown
9:30 Close Up I	9:30 Close Up I		9:30 Modern Video Shorts " Without Warning"	
10:00 Humanities "Mountain People...A Sense of Place" "Arizona State Prison-The Writer's Workshop"	10:00 Humanities "Andy"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms.Corrine Droessler Ms. Veronica Nowak	10:00 The People's Potpourri "How Cities Slash Spending - Parts I and II"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms.Corrine Droessler Ms. Veronica Nowak
11:00 Modern Video Programs "Catch Hollywood in the Act" "A Century Crystalized"	11:00 Modern Video Programs "Obesity"	11:00 NASA Presents "Research Project X-15" "Space Shuttle: Mission to the Future"	11:00 Modern Video Programs "Salt - The Essence of Life" "A Day at the Zuyder Zee"	11:00 NASA Presents "Rearch Project X-15" "Space Shuttle: Mission to the Future"

FALL '83

Week of December 5

EVENING

MONDAY 5	TUESDAY 6	WEDNESDAY 7	THURSDAY 8	FRIDAY 9
6:30 Of Public Interest	6:30 The Human Condition	6:30 Focus	6:30 The Human Condition	6:30 Of Public Interest
7:00 Look "Construction"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Thinkabout "Search for the Unknown" "Drawing Conclusions"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Look "Construction"
7:20 Thinkabout "Where Should I Go?"		7:30 Problem Solving "Contemporary"		7:20 Thinkabout "Where Should I Go?"
7:30 Inside Out "Just One Place"				7:30 Inside Out "Just One Place"
8:00 Cast Your Own Shadow "Jobs for the Future"	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Close Up II	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Cast Your Own Shadow "Jobs for the Future"
8:30 Close Up I		8:30 Modern Video Shorts "Without Warning"		8:30 Close Up I
9:00 Humanities "Andy"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 The People's Potpourri "How Cities Slash Spending - Parts I and II"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 Humanities "Andy"
10:00 Modern Video Programs "Obesity"	10:00 NASA Presents "Research Project X-15" "Space Shuttle: Mission to the Future"	10:00 Modern Video Programs "Salt-The Essence of Life" "A Day at the Zuyder Zee"	10:00 NASA Presents "Research Project X-15" "Space Shuttle: Mission to the Future"	10:00 Modern Video Programs "Obesity"

FALL '83

Week of December 12

MORNING

MONDAY 12	TUESDAY 13	WEDNESDAY 14	THURSDAY 15	FRIDAY 16
8:00 Look "Construction"	8:00 Look "The City"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	8:00 Thinkabout "Practice for Success" "One Step at a Time"	8:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams
8:20 Thinkabout "Where Should I Go?"	8:20 Thinkabout "What Should I Do?"			
8:30 Inside Out "Just One Place"	8:30 Inside Out "Yes, I Can"		8:30 Problem Solving "The Future"	
9:00 Cast Your Own Shadow "Jobs for the Future"	9:00 Cast Your Own Shadow "Fast Foods"	9:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	9:00 Close Up II	Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown
9:30 Close Up I	9:30 Close Up I		9:30 Modern Video Shorts "The Dream - Brazil"	
10:00 Humanities "Andy"	10:00 Humanities "Legacy of the Depression: Parts I and II"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	10:00 The People's Potpourri "The History of Tea" "Women in Sports - Reflections of the Champions"	10:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak
11:00 Modern Video Programs "Obesity"	11:00 Modern Video Programs "If You Loved Me"	11:00 NASA Presents "STARPAHC" "A View of the Sky"	11:00 Modern Video Programs "Soft is the Heart of a Child" "The Fellows"	11:00 NASA Presents "STARPAHC" "A View of the Sky"

FALL '83

Week of December 12

EVENING

MONDAY 12	TUESDAY 13	WEDNESDAY 14	THURSDAY 15	FRIDAY 16
6:30 Of Public Interest	6:30 The Human Condition	6:30 Focus	6:30 The Human Condition	6:30 Of Public Interest
7:00 Look "The City"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Thinkabout "Practice for Success" 'One Step at a Time"	7:00 Methods and Materials for Teaching Children with Learning Problems Dr. Brenda T. Williams	7:00 Look "The City"
7:20 Thinkabout "What Should I Do?"				7:20 Thinkabout "What Should I Do?"
7:30 Inside Out "Yes, I Can"		7:30 Problem Solving "The Future"		7:30 Inside Out "Yes, I Can"
8:00 Cast Your Own Shadow "Fast Foods"	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Close Up II	8:00 Dealing with Cultural Differences in the Classroom Dr. Carlton E. Brown	8:00 Cast Your Own Shadow "Fast Foods"
8:30 Close Up I		8:30 Modern Video Shorts "The Dream - Brazil"		8:30 Close Up I
9:00 Humanities "Legacy of the Depression: Parts I and II"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 The People's Potpourri "The History of Tea" "Women in Sports - Reflections of the Champions"	9:00 Methods and Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 Humanities "Legacy of the Depression: Parts I and II"
10:00 Modern Video Programs "If You Loved Me"	10:00 NASA Presents "STARPAHC" "A View of the Sky"	10:00 Modern Video Programs "Soft is the Heart of a Child" "The Fellows"	10:00 NASA Presents "STARPAHC" "A View of the Sky"	10:00 Modern Video Programs "If You Loved Me"

FALL '83

Week of December 19

MORNING

MONDAY 19	TUESDAY 20	WEDNESDAY 21	THURSDAY 22	FRIDAY 23
8:00 LOOK "The City"	8:00 LOOK "The Farm"	8:00-Methods & Materials for Teaching Children With Learning Problems Dr. Brenda T. Williams	8:00 Thinkabout "Plan Ahead" "Calm Your Jitters"	8:00-Methods & Materials for Teaching Children With Learning Problems Dr. Brenda T. Williams
8:20 Thinkabout "What Should I Do?"	8:20 Thinkabout "Ways To Remember"			
8:30 Inside Out "Yes, I Can"	8:30 Inside Out "I Want To"		8:30 Problem Solving "Rights and Responsibilities"	
9:00 Cast Your Own Shadow "Fast Foods"	9:00 Cast Your Own Shadow "How To Start Your Own Business"	9:00-Dealing With Cultural Differences In The Classroom" Dr. Carlton E. Brown	9:00 Close Up II	9:00-Dealing With Cultural Differences In The Classroom" Dr. Carlton E. Brown
9:30 Close Up I	9:30 Close Up I		9:30 Modern Video Shorts "Zen Culture, Zen Spirit"	
10:00 Humanities "Legacy of the Depression: Parts I & II"	10:00 Humanities "Welcome to God's Country"	10:00-Methods & Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	10:00 The Peoples's Potpourri "You and ME" "In His Father's Footsteps"	10:00-Methods & Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak
11:00 Modern Video Programs "If You Loved Me"	11:00 Modern Video Programs "Portrait of a Killer" "Our Brothers' Keeper"	11:00 NASA Presents "The World Was There" "Who's Out There"	11:00 Modern Video Programs "Pat Boone and the Kids" "Adventures in the China Trade"	11:00 NASA Presents "The World Was There" "Who's Out There"

FALL '83

Week Ending December 19

EVENING

MONDAY 19	TUESDAY 20	WEDNESDAY 21	THURSDAY 22	FRIDAY 23
6:30 Of Public Interest	6:30 The Human Condition	6:30 Focus	6:30 The Human Condition	6:30 Of Public Interest
7:00 Look "The Farm"	7:00 Medhods & Materials For Teaching Children With Learning Problems Dr. Brenda T. Williams	7:00 Thinkabout "Plan Ahead" "Calm Your Jitters"	7:00 Methods & Materials For Teaching Children With Learning Problems Dr. Brenda T. Williams	7:00 Look "The Farm"
7:20 Thinkabout "Ways To Remember"				7:20 Thinkabout "Ways To Remember"
7:30 Inside Out "I Want To"		7:30 Problem Solving "Rights And Responsibilities"		7:30 Inside Out "I Want To"
8:00 Cast Your Own Shadow "How To Start Your Own Business"	8:00 Dealing With Cultural Differences In The Classroom Dr. Carlton E. Brown	8:00 Close Up II	8:00 Dealing With Cultural Differences In The Classroon Dr. Carlton E. Brown	8:00 Cast Your Own Shadow "How to Start Your Own Business"
8:30 Close Up I		8:30 Modern Video Shorts "Zen Culture-Zen Spirit"		8:30 Close Up I
9:00 Humanities "Welcome to God's Country"	9:00 Methods & Materials for Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 The People's Potpourri "You and ME" "In His Father's Footsteps"	9:00 Methods & Materials For Teaching Communication Skills to Teachers Ms. Corrine Droessler Ms. Veronica Nowak	9:00 Humanities "Welcome to God's Country"
10:00 Modern Video Programs "Portrait of a Killer" "Our Brothers' Keeper"	10:00 NASA Presents "The World was There" "Who's Out There"	10:00 Modern Video Programs "Pat Boone & The Kids" "Adventures in the China Trade"	10:00 NASA Presents "The World Was There" "Who's Out There"	10:00 Modern Video Programs "Portrait of a Killer" "Our Brothers' Keeper"

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DOCUMENTATION FIVE

SCS Engineering Report

Project SCS III

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  SCS Field Test — Field Test
  Field Test Addendum — Addendum
  McMartin FCC Comments — FCC

Project SCS III Engineering Report

I. Project SCS III Engineering Goals

Project SCS III had three primary engineering goals for the 1980-81 operating year. These were as follows:

1. Operationally test the split-channel SCA circuit designed by CenTeX;
2. Test the viability of having an FM station re-broadcast the SCA program being broadcast on WBCI; and
3. Interconnect the SCA circuit to local CATV systems so the programming can be delivered via the CATV circuits.

Each engineering goal will be discussed in terms of technical and operational considerations.

II. Project SCS III Studio and Program Origination Facilities

Project SCS III programs are originated from a small trailer located at Berkeley Elementary School, Williamsburg-James City County School Division. This facility was made available at no cost to CenTeX by the school division as a result of a joint 20-year contract CenTeX has with Williamsburg-James City County schools.

The Project SCS studio has been designed carefully to meet program origination requirements. On the page following, the studio equipment and facilities are listed. On page 3, the equipment layout is depicted by a block diagram.

The studio was used to produce 70 hours of broadcast programming each week. This included 65 hours a week of audio-programming for the print-handicapped and five hours of teletype programming per week for the deaf.

The audio programming consisted of live and tape playback programs. The studios were set up so that it was possible to use both studios simultaneously: one for on-air, the other for recording programs. The

Project SCS III:

Studio/Program Origination

A. List of Equipment

1	Technics 1500 RS Tape Recorder
3	Wollensak AV2520 Cassette Recorders
1	Sony TC-140 Cassette Recorder
1	Ampro AC-6 Audio Console
3	Microphones
4	SCA Receivers, McMartin
2	Teletype Machines
1	C-Phone Teletype
1	Stand-Alone Teletype Transmitter
1	Realistic Headphone

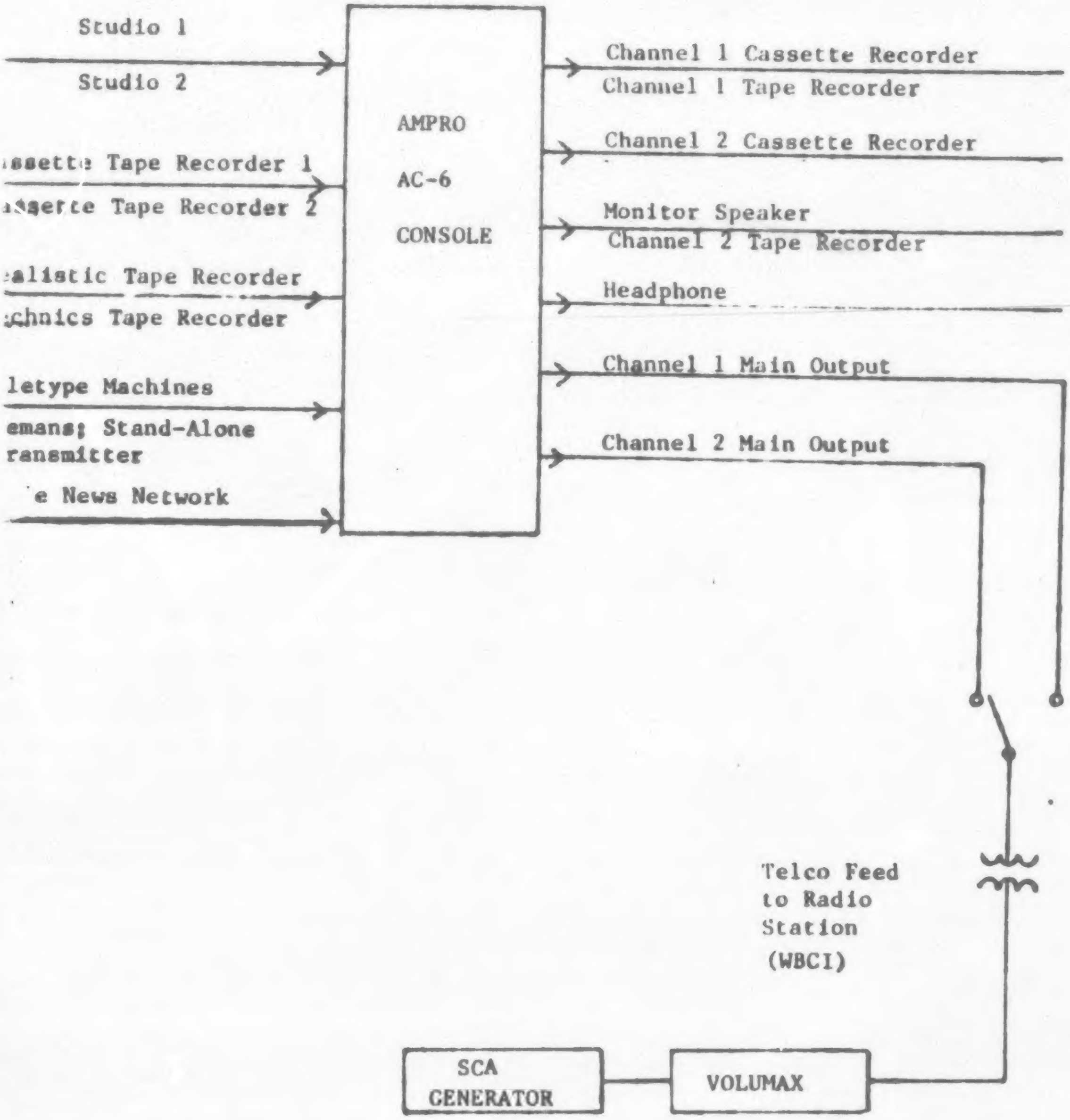
Miscellaneous cable, equipment, accessories

B. Facilities

2	Editing Desks
1	Editing Table
1	Control Room
2	Reading Rooms
1	Reception/Program Preparation Room
1	Office

Miscellaneous supplies and accessories

Project SCS III: Studio Set Up
Block Diagram


Studio 1
Studio 2
ssette Tape Recorder 1
assette Tape Recorder 2
alistic Tape Recorder
chnics Tape Recorder
letype Machines
emans; Stand-Alone
ransmitter
e News Network
AMPRO
AC-6
CONSOLE
Channel 1 Cassette Recorder
Channel 1 Tape Recorder
Channel 2 Cassette Recorder
Monitor Speaker
Channel 2 Tape Recorder
Headphone
Channel 1 Main Output
Channel 2 Main Output
Telco Feed
to Radio
Station
(WBCI)
SCA
GENERATOR
VOLUMAX

facilities and control room were designed for maximum flexibility, so that the project could utilize the varying times of the volunteers and provide the maximum amount and quality of programming.

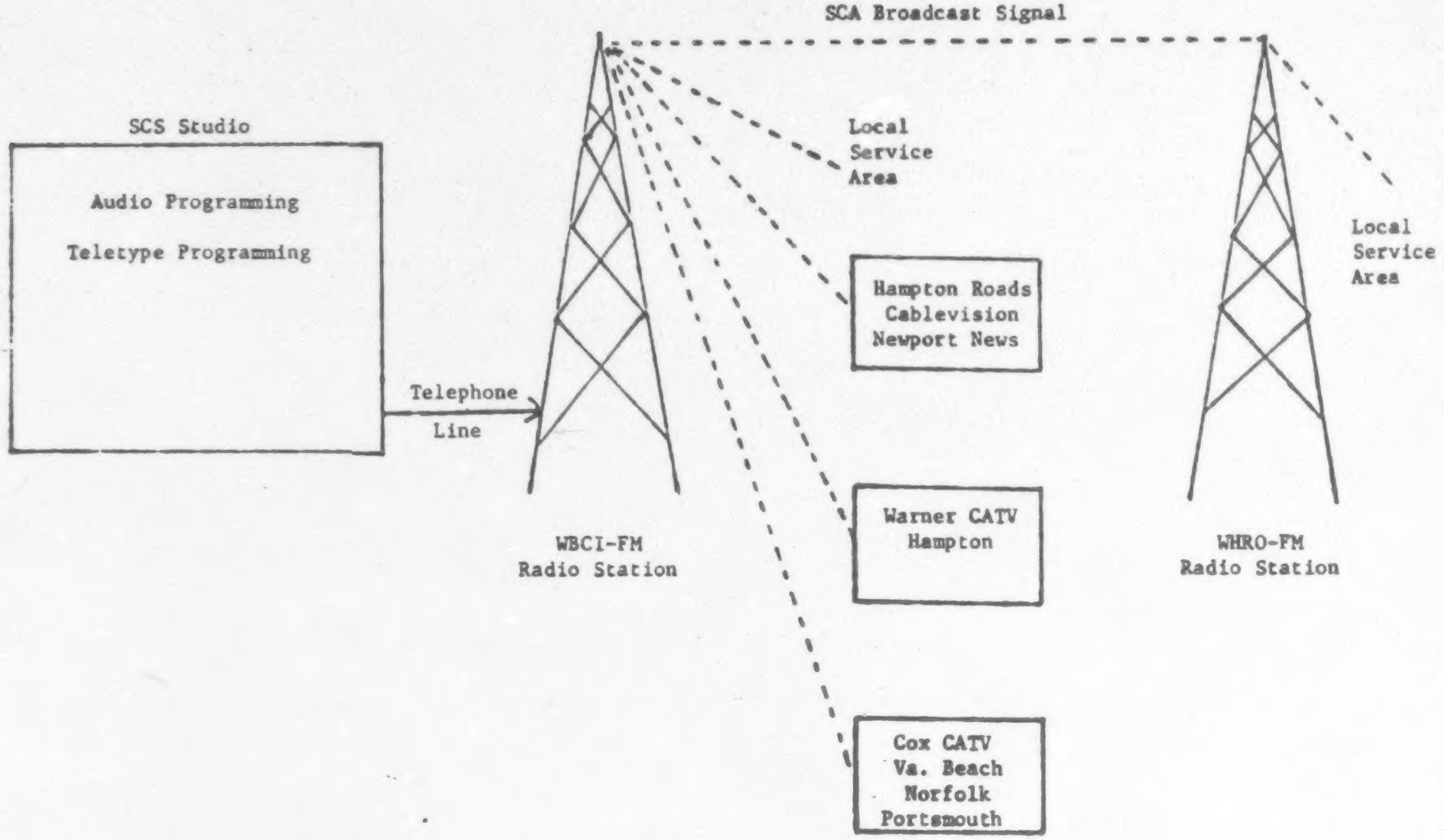
The programming for the deaf was prepared on teletype so the deaf would have a hard copy of the program they could read. The programming was put on paper punch tape for later broadcast. The paper tape was chosen because it was and still is a "standard" in the teletype business, but, more importantly, minor corrections can be made, and the program can be transmitted at the maximum speed of 60 words per minute.

All the programming is routed through the control console which feeds the telephone loop to the transmitter. Other equipment in the studio includes editing equipment and broadcast monitoring equipment. Since all of the equipment is strategically placed, it is possible for one operator to originate programs, edit material, work with volunteers and monitor the broadcasts. Equipment maintenance and repair is done in non-broadcast times so as to minimize broadcast interruptions. In fact, over the entire 3½-year project, the scheduled broadcasts were only interrupted by Virginia Power and Electric service outages. The studio and origination equipment never caused a major problem.

III. Project SCS III Transmission Circuits

Project SCS III transmission circuits are drawn out on page 5 . The transmission chain involves two FM stations, three CATV systems and the radio receive sites. The program originates at the studio and is sent by telephone line to WBCI-FM, the first FM station. WBCI then puts the program on its SCA for transmission. This transmission is picked up by the local radio receivers, the three CATV systems, and the second FM station. The CATV

Project SCS III
Broadcast Circuit Schematic


SCA Broadcast Signal
SCS Studio
Audio Programming
Teletype Programming
Telephone
Line
Local
Service
Area
Hampton Roads
Cablevision
Newport News
Warner CATV
Hampton
Cox CATV
Va. Beach
Norfolk
Portsmouth
WBCI-FM
Radio Station
WHRO-FM
Radio Station
Local
Service
Area

system picks up the program with a specially tuned antenna and receiver and the program is then converted to one of the three CenTeX FM channels on each CATV system. The second FM station, WHRO-FM in Norfolk, picks up the SCA circuit for WBCI and rebroadcasts the program on its SCA circuit. is in turn picked up by receivers in the Norfolk/Virginia Beach area.

IV. CenTeX Split-Channel SCA Circuit

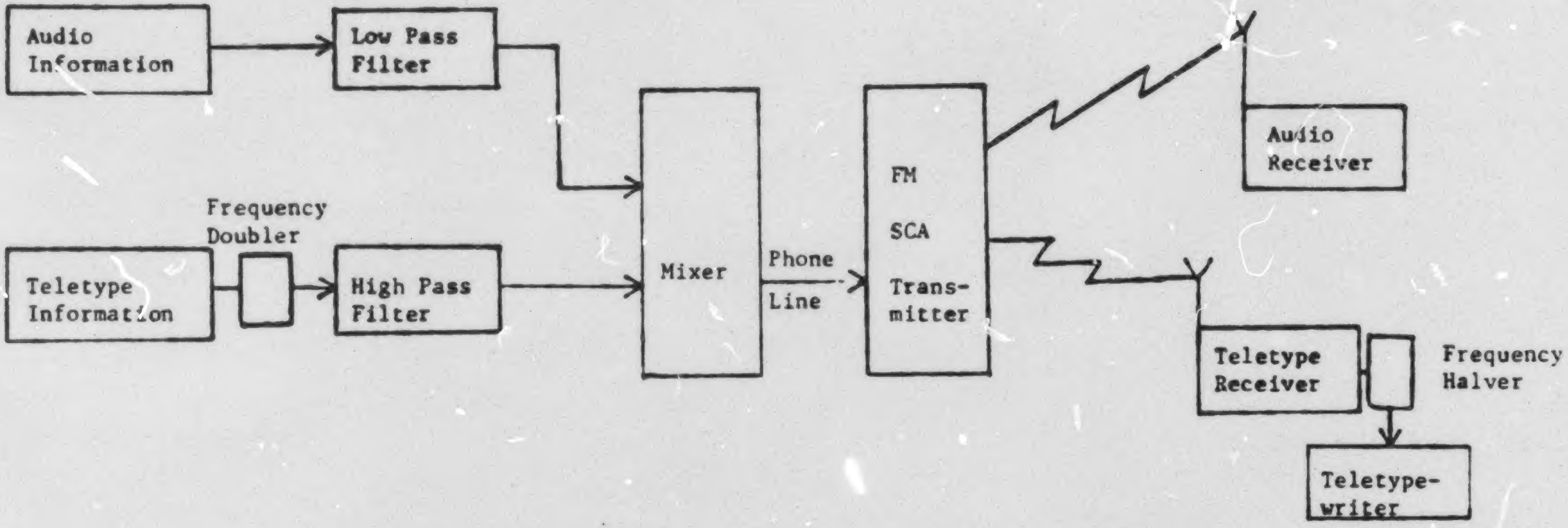
A. Description

The SCA split-channel circuit was designed, developed and field-tested by CenTeX for the purpose of being able to provide simultaneous, non-compatible programs over the same SCA circuit.

The CenTeX split-channel system utilizes audio and TTY methodologies on a single 5KHz FM-SCA circuit. On the transmit end, the audio is sent through a low pass filter, removing the frequencies above 2,000 Hz from the program. The TTY information is generated at 2,800 Hz and 3,600 Hz (twice normal frequencies) and is filtered to remove all frequencies above 3,600 Hz and below 2,800 Hz. These programs are combined at the studio and then are sent to WBCI-FM for transmission. The receive mode is determined by the type of SCA receiver installed. The audio-receiver has a low-pass filter installed so that only the audio program can be heard. The TTY information is filtered out. The TTY receiver has a high-pass filter installed to filter out the audio and allow only the TTY to be processed. The TTY signal is fed into a frequency halver so that the TTY can be operated directly by the receiver. A block diagram of the split-channel circuit can be found on page 7.

The filters are only available commercially from McMartin Industries as they are the only manufacturer making these filters. The frequency halver was designed by CenTeX and was built to CenTeX specifications by a local

Block Diagram of the CenTeX Split-Channel SCA Circuit


Audio Information
Low Pass Filter
Frequency Doubler
Teletype Information
High Pass Filter
Mixer
Phone Line
FM SCA Transmitter
Audio Receiver
Teletype Receiver
Frequency Halver
Teletype-writer

electronics firm. Its cost is approximately $15.00 if 100 or more halvers are ordered. The cost is considerably less if a thousand or more are ordered. The filters and halvers were installed by CenTeX technicians. Because the components are mounted inside the receiver, no accessories or additional cabling was required. In fact, the altered receiver looks no different than a "regular" receiver.

B. Results

The CenTeX split-channel SCA was an original concept which was designed and developed by CenTeX. Since this was part of the experimental program, CenTeX conducted an extensive testing and use-program to determine the costs, technical considerations, in situ experience and operational factors related to the split-channel system. The results are summarized below, and the complete engineering data package is appended for reference (Appendix One).

Briefly, the system works and can provide simultaneous service. However, the disadvantages are so severe, that the system is not viable except when there are no other options. The much higher costs, the severely restricted service area, the poor technical quality of the circuits and the decrease in reliability make the split-channel system generally unacceptable. The unusual conditions which make the system an option are discussed below.

The split-channel SCA designed by CenTeX permits the simultaneous broadcasting of both TTY (teletype information) and audio. Since neither program interacts with the other, there is no interference. The SCA channel is divided so it can be used for low-grade voice and data transmissions.

Normally, two subcarriers would be required to provide the two services simultaneously, but, by uniquely combining the programs, CenTeX has found a way to do it with one subcarrier. Obviously, this saves the cost of renting an extra phone line and SCA circuit to provide the second service.

However, this process also has some major disadvantages. The effective service area is reduced by more than 67%. In the best case, the effective radius is reduced from 35 miles to 20 miles, and reduction in service area from 3,850 square miles to 1,257 square miles. In the worst case, the radius was reduced from 50 miles to 17 miles, a reduction from 7,850 square miles to 908 square miles, or a reduction of 88%.

Field strength measurements and tests were taken at a number of locations around the transmitter. These tests were conducted at four different distances (15, 20, 25, and 30 miles) on eight different locations (the full results can be found in Attachment One). The tests show that empirically, the effective coverage is about 15 miles from the transmitter. At 20 miles, in some cases, there were problems with the signal. At 25 and 30 miles, most locations had problems. It should be noted that these measurements were taken outside, away from buildings and structures, and used a higher gain antenna than the one that comes with the radio receiver. Thus, these results were the optimum that could be expected. As the use-tests revealed, the actual effective coverage area was much lower than these tests indicated. The effective coverage area was reduced between 67% and 88%.

The fidelity and reliability of the service is also reduced substantially. Because the audio is restricted to 2,000 Hz bandwidth, voices sound muffled. Women's voices in particular are difficult to understand because much of their voice is filtered out prior to broadcast. The TTY program experiences a data failure rate much higher than the non-split "channel" version.

In addition to the much poorer technical quality, the circuit gains "noise" from the splitting process itself. Because the circuit is "split." the background noise increases, at a minimum, by 3 db. This translates into a higher level of background noise and makes the program less intelligible. This, coupled with greater multipath problems, makes the effective coverage area even less than that indicated above.

Another consideration was that of maintenance and upkeep. Although the program was only in operation for eight months, the maintenance (repair of receivers, alignment and troubleshooting) increased by several factors of magnitude. The filters often had to be retuned, the receivers realigned, the frequency splitter repaired, and many field trips were required to obtain acceptable performance, even at locations close to the transmitter. It was not unusual to make several trips to the same location throughout the period to try to improve the quality of reception or even to get an acceptable level of performance. In addition, since the transmission levels from the studio were more critical in the split channel system, periodic calibration was also required.

The cost factors were likewise affected. The cost of an audio-only receiver modified to be used for split-channel circuits increased from $60 to $87, a 45% increase in cost. The TTY receiver increases from $60 to $136, an increase of 126%. The studio components to generate the programming in the correct format raises the total studio cost by $1,300.

Field placement of the receiver became much more difficult. The normal SCA receiver could be sent by mail or taken to a subscriber's home and simply plugged in. Because of the increased susceptibility of multipath problems and the reduced coverage area, it became mandatory that a qualified technician install the receiver in the home. Often, an outside antenna or "rabbit ear" antenna was required to obtain an acceptable signal, and in several cases, it was necessary to take field strength readings to pinpoint the best location for the radio. In some instances, this meant moving the radio from one room to another, or even raising it by as little as six inches.

V. Summary

Project SCS has successfully completed all three objectives. The split-channel circuit was put into operation and tested; the second FM station (WHRO) is relaying the program currently, and, three different CATV companies have put the SCS programming on their CATV systems. The split-channel circuit works, but is feasible only under unusual circumstances. These circumstances are as follows:

1. the channel availability in any area is restricted to only one channel,
2. the coverage area to be serviced is very small,
3. an enormous amount of programming is already available,
4. the increased costs are affordable, and
5. the reduced quality is acceptable.

Operationally, however, it is possible to serve several groups using one subcarrier by judiciously scheduling the programs sequentially. Project SCS did this for the first two years and found that it did meet the needs of the participants.

The relaying of the signal via a second FM station and the CATV systems has also been accomplished. The only technical problems arose from obtaining an adequate signal from the main station. This meant going higher with the antenna, using a higher gain antenna, or both. Once an adequate signal was obtained, it proved to be as easy to relay the signal as it was to originate programming from that location. It is worth noting that WHRO will probably plan to originate some of its own programs and still use SCS programming on a relay basis to provide a service better-tailored to the needs of the participants in their local coverage area.

From an engineering and experimental aspect, Project SCS has successfully met its third year objectives and determined the efficiency, costs, effectiveness, technical paramenters and operating requirements surrounding the extension and use of SCA circuits.

PERTINENT DATA REGARDING THE CENTEX^{C} SPECIAL COMMUNICATIONS SERVICES OPERATIONS

October, 1982

1. CenTeX^{C}'s SCS was the first broadcasting service to be established in the Commonwealth of Virginia to serve all five of Virginia's major sensory-deprived populations: the hearing impaired, the deaf-blind, the homebound, as well as the visually impaired and severely handicapped.

2. Almost one half million dollars of non-Virginia-origin funding was spent to establish what is probably Virginia's most comprehensive SCS-type operation to create the four-format broadcasting facilities (audio/teletype/Braille Machine and two-way TV formats), required to serve the information and broadcasting entertainment needs of these five major sensory/physically deprived persons who account for approximately 6.2% of America's total population.

3. The CenTeX operation uses the sub-carriers of commercial and non-commercial FM stations, CATV distribution channels, and two-way over-the-air to deliver its sensory-deprived programming via a network running from the Capitol City of Richmond to Virginia Beach on the Atlantic Ocean. CATV and FM audio channels are provided by Cox Cable, Warner-Amex Cable, Hampton Roads Cable, and, more recently, by Continental Cable Systems.

   CenTeX also has had an experimental arrangement under which CenTeX's SCS programs are made avilable for use by WHRO. Though this arrangement has expired, CenTeX hopes to renew the arrangement so that WHRO and CenTeX can exchange programming produced by each other.

   In December 1981, CenTeX received an award for one half million dollars to extend the CenTeX Network to Virginia's Eastern Shore. When this expansion of the CenTeX "Rib" is operating, CenTeX expects to use the sub-carrier of a 50,000 watt commercial station to serve that Virginia area with SCS programming.

4. Currently, under the direction of George Hall, CenTeX is endeavoring to work out an arrangement to use the CenTeX Network to provide, during certain hours, the interchange of programming, not only between WHRO and CenTeX, but also between WHRO, CenTeX and the Virginia Voice. From Richmond, the Voice already has a network serving the Western areas of Virginia. Thus, a complete interchange network will enable Virginia's SCS-type operations to use each other's programming.

5. CenTeX was the Nation's first (and perhaps still is the only) SCS-type service which delivers SCS services 24-hours per day, seven-days-per-week.

6. CenTeX, each week produces not less than 62.5 hours of timely news and information programming specifically designed to meet the needs of Virginia's sensory-deprived populations.

7. Every two years, CenTeX uses statistically-accurate methodologies to determine what programming its service populations want, and, secures from its listeners both criticisms regarding the content, as well as the quality of its SCS broadcasting services.

8. CenTeX is the first USA SCS-type service to develop the technology by which programming for the three of the four formats required to serve the sensory-deprived can be delivered over the sub-carrier of a single FM station. Further, CenTeX has developed the two-way audio/video network to deliver programming to the homebound, and, when desirable these network circuits can be the only such multiple-service SCS-type operation in Virginia, and it is for this reason that CenTeX wants to develop a two-way connection with WHRO and the Voice so that all of Virginia can take advantage of CenTeX's pioneering, unique programming services for the sensory-deprived populations of the Commonwealth.

Please find enclosed, a copy of a recent brochure describing the CenTeX SCS services.

*NOTE: Equipment to complete the audio/video network distribution of CenTeX SCS services into Richmond has been installed. The audio-only circuitry is in the process of installation.

PROJECT SCS: PROJECTED BUDGET (JULY 1982 - JUNE 1983)

BUDGETED ITEMS	BUDGETED COSTS	FUNDING ATTAINED	FUNDING TO BE OBTAINED

DOCUMENTATION SIX

CenTeX'S SCS Evaluation Report

SCS (SPECIAL COMMUNICATIONS SERVICES)

PRINT-HANDICAPPED SURVEY

RESULTS, SUMMARY AND RECOMMENDATIONS

SUBMITTED BY:

T. LaVerne Ricks-Brown
June 1982

Inclusive within this report are the results from the SCS (Special Communications Services) Print-Handicapped Survey, as well as a summary and recommendations. The survey was administered during April and May of 1982 to *twenty-seven of our forty-five print-handicapped clients. Execution of the survey was done through interviews; twelve personal face-to-face interviews and fifteen telephone interviews. The SCS survey was divided into five categories: Consumer Characteristics, Current Programming Preferences, Listening Time Information, Consumer Suggestions and Technical Feedback.

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*This number includes an interview with a hospital supervisor who represented a blind client of SCS.

SCS PRINT-HANDICAPPED SURVEY RESULTS

I. CONSUMER CHARACTERISTICS

A. Residential Locations:

Williamsburg = 13
Gloucester = 3
Norfolk = 3
Hampton = 2
Lackey = 1
Newport News = 1
Portsmouth = 1
Poquoson = 1
Saluda = 1
Yorktown = 1

B. Ages:

30-39 = 1
40-49 = 4
50-59 = 3
60-69 = 10
70-79 = 7
80-over = 2

C. Sex:

Male = 17
Female = 10

D. Racial Breakdown:

Black = 9
Caucasian = 18
Other = 0

E. Religious Information:

All persons interviewed were Christians

F. Educational Background:

Elementary School = 4
High School = 9
Correspondance and/or Secretarial School = 2
College (4 yrs) = 5
Naval Academy = 1
Masters = 4
Ph.D./M.D. = 1

G. Persons Working Now:

Yes = 3

No = 24

H. Areas of Present or Past Work Experience:

Domestic, Cook, Cleaning = 4

Teacher = 3

Storekeeper = 3

Secretary = 2

Housewife

Credit Manager

Electrician

Historical Interpreter

C&P Telephone Worker

Nurse

Doctor

Auditing Work

Aviation Officer

Truck Driver

Chaplin

Sales Person

Medical Technician

I. Hobbies and Interests

Gardening & Yard Work, Plants = 4

Sewing = 4

Music = 4

Talking Books = 4

Cooking = 2

Carpentry = 2

Bowling = 2

Collecting Western Items = 1

Collecting Antiques = 1

Horseback Riding = 1

Fishing = 1

Exercising = 1

Refinishing Furniture = 1

CB & Ham Radio = 1

J. Disability Information:

1. Total Blind = 10

   Partly Blind = 1

   Legally Blind = 16

2. Blind Since Birth = 5

   Blind After Birth = 21

K. Listeners Living Alone:

Yes = 5

No = 21

L. Household Occupants Count:

With one other person = 16

With two other people = 1

With three or more people = 4

II. CURRENT PROGRAMMING PREFERENCES

A. Present Schedule:

		Listen		
		Frequently	Occassionally	Not At All
a.m.	9:00 World/National News, Horoscope	12.5	8	4.5
	9:30 State/Local News, Ann Landers	15.5	6	3.5
	10:00 Articles of Interest	12	6	7
	10:30 Sports, Obituaries	6.5	6.5	12
	11:00 From the Bookshelf	5	5	15
p.m.	12:00 CNN (Cable News Network)	7	9	9
	5:00 Articles of Interest	8	6	11
	6:00 National/State/Local News	7	6	12
	7:00 CNN (Cable News Network)	3	5	17

B. Current Program Comments:

1. Stop repeats of morning programming in the evenings.
2. CNN should be limited. CenTeX presently offers too much of CNN. CNN is the same thing repeated time after time again. (4)
3. Did not like book Woman of Independent Means.
4. Morning programming needs to come on earlier (7:00a.m.). Some people work during the day. (2)
5. Some programs are too long, especially some news articles.
6. After 5:00 p.m., I listen to TV. (2)
7. What happened to having editorials read over the CenTeX station?
8. More local news needed.
9. A printed schedule of current programming would be nice to have.
10. Often minutes go by when no one is on the air at all.
11. CenTeX is not really making the best use of the SCS system with CNN on only during all week-ends.
12. Not enough Virginia Voice programming.
13. CNN news is a good idea.

14. Sports programming should include more coverage of local Black colleges.

15. Seems good to me. Satisfied with service. Very good...I think it's wonderful. (3)

16. Would like to hear more information on Blacks!

III. LISTENING TIME INFORMATION

A. Total Present Listening Time:

Monday thru Friday	Consumer Count
Less than thirty minutes	1
30 Minutes to 1-1/2 Hours	14
Two Hours	7
Four Hours	3

Saturday thru Sunday	Consumer Count
Less than thirty minutes	1
One Hour	4
Two Hours	2
Depends on personal schedule	1
Not at all	17
Not at all on Sunday	1
Saturday for two hours	1

B. Present Listening Compared to Past Listening:

	Consumer Count
More Now	6
Less Now	* 16
About the same	4

* Less now, for many, due to being outside more, our present SCS airing hours are not the best for our listeners, and many have poor radio receiver reception.

C. Best Time for Listening; A.M./P.M.:

		Consumer Count
a.m.	6:00 or 6:30	3
	7:00	8
	8:00	1
	9:00	2
	10:00	1
	Weekends	1
	Open General Response	3
p.m.	2:00	1
	5:00 or 5:30	2
	6:00	2
	7:00	3
	8:00 or 8:30	2
	Anytime, no best time	3
	Times now are fine	1

IV. CONSUMER SUGGESTIONS

A. Program Elimination Suggestions:

1. Omit the book, Woman of Independent Means (2)
2. Ann Landers
3. Limit CNN (2)
4. Omit reading of books
5. Horoscope
6. Sports (Some persons were not interested in sports but felt that it should be available for others.)

B. Program Expansion Suggestions:

1. Talk shows (2)
2. More music (country western and gospel)
   Note: Many listeners felt that entertaining music has no place on the CenTeX channel.
3. Sunday News
4. Give listing of programming schedule each a.m. over the air.
5. If possible, put audio part of CenTeX's educational television programming on SCS radio in the evening.

6. Comics please! (2)

7. Articles of Interest from good information sources.

8. Household Hints. (2)

9. Cooking Hints.

10. Good Grooming Tips (inexpensive ways for listeners to keep up their appearance and not let themselves go.)

11. Counseling for the Psychology of Personhood Program. (Hope needs to be spoken to, especially with handicapped -- positive reinforcement.)

12. Financial Clinic Show

13. Change A.M. programming to begin at 7:00.

14. Black Achievements and Issues (1/2 hour show done by Blacks)

15. What's Going on With the Government Show

16. Religious programming and music on Sundays. (3)

17. Saturdays are lonesome days and it would be nice to have programming other than CNN then.

18. Would like to hear more editorials from local papers.

19. When planning new schedule, consider limiting the air time of those programs which appear on cable television.

20. Include religion in programming if it is going to be different from those religious programs on radio and television.

21. More regular programming on weekends.

22. More local news

23. Read articles from "Time" and "Newsweek"

24. Include coverage of William & Mary football and basketball games. (NOTE: Also keep in mind comment on coverage of local Black colleges.)

25. A.M. news from 6:30 to 7:30 and then repeat programming at mid-morning.

26. For the purposes of SCS, CenTeX should obtain CNN 2.

27. Give TV schedule daily

28. Give shoppers specials and sales. (2)

29. Really use system, have SCS programming all seven days.

30. Read the entire paper.

31. Use more Virginia Voice Programming

32. Gardening Tips

33. More editorials

34. More sports coverage on local Black colleges.

35. Would like to hear more information about Black people!

C. News Programming Suggestions:

	Consumer Count
More news	12
Less news	0
About the same amount of news	14

D. Topics of Interest for Future Programming:

	Consumer Count
Local news	26
National news	25
International news	24
Human interest stories	23
Weather	22
Health Information	22
News about other blind people and concerns of the blind	21
Legal information	21
Consumer information	19
Obituaries	18
Dear Abby/Ann Landers	18
Short stories	18
TV Guide	17
Information about famous people	17
Business and Economic news	16
American History	16
Recipes and cooking tips	15
Biographies and Autobiographies	15
Novels	14
Tony Brown's Journal (Black Issues)	13
Sports	13
Science and Technology	13

Topics of Interest for Future Programming, con't.

	Consumer Count
Religion	13
Excerpts from Women's Magazines	12
Book reviews	12
Non-fiction books	12
Any other columnists	8
Album reviews	8

E. Special Interest Programming for the Future:

	Consumer Count
CNN (Cable News Network)	24
C-SPAN (U.S. Congressional Coverage)	20
Sports	13
Arts (Cultural)	8

F. Weekend Programming Recommendations:

1. Continue regular SCS programming (less of CNN) (3)
2. Religious programming (suggested times from 7:30-9:30a.m.) and Spirituals (6)
3. Nondenominational religious programming
4. News from Sunday paper (8:00 then repeat it at 1:30)
5. Sports Illustrated Program on Saturdays

G. Comments (In addition to those already mentioned):

1. Please add Flowers in the Attic and Petals in the Wind to our "From the Bookshelf" program.
2. Please add the following magazines to the SCS reading list: "National History", "50 Plus" and "National Geographic".
3. Please read the book, The Eye of the Needle.
4. The Virginia State Council of Churches sponsors the teaching of international Sunday school - tapes are available and CenTeX might want to look into this.

5. The National Foundation for the Blind has a catalogue on adapted utensils for cooking.

6. The history programs need to be kept short and with a common denominator of human experience.

7. I would listen a lot more if I had a better machine and a list of the programming.

8. Good fantasy books to add to programming include The Hobbit and The Lord of Rings.

9. Please read Beloved Son by Steve Alan.

10. Send out program guides. I find myself watching cable TV more. You have CNN on most of the day. Sometimes SCS programming changes and I have no program guide.

11. I think it would be beneficial for CenTeX to have a toll-free number so that listeners outside the Williamsburg area can feel free to give a call.

12. Very much satisfied with our service. Spends less time listening to us than he used to because he now has cable TV and and he his wife also listen to WNIS more.

V. TECHNICAL FEEDBACK

A. Length of Time Consumer has had Radio:

From the beginning of SCS = 22

From one to three years = 5

B. Problems With Hearing Radio?

Yes = 13 No = 14

C. Problems Cited With Radios

1. Some mornings the reception is not clear.
2. Music in background (sometimes talking) (9)
3. Static (3)

SCS PRINT-HANDICAPPED SURVEY

Summary and Recommendations

1. In attempting to administer the SCS Print-Handicapped Survey, it was discovered that our present SCS client listing needed updating due to deaths, relocation of residences, and declining health. An updated print-handicapped client listing has been completed and also includes possible new clients suggested by some of those interviewed. The listing comes to a total of 44 persons which are not inclusive of the possible five new clients.

RECOMMENDATIONS:

A person working with SCS should be assigned the responsibility of an all-out campaign for obtaining many more clients. We have the broadcasting facilities and equipment as well as the client radio-receivers. Therefore, it is imperative that we make the connection and serve the masses of people out there in need of our service. Our present client number is by far too low.

2. Approximately two-thirds of our clients on the updated listing are male. Of the interviewees, one-third were Black. Survey results indicate age groupings where a little over two-thirds of the interviewees are over 60. A large majority of those surveyed did not live alone. A large number also did not work. Educational backgrounds varied with approximately half of the clients surveyed having an educational background of high school or less and those remaining varying from correspondence school to medicine. One-third of the interviewees were listed as totally blind and with the exception of five, they were not born blind. A diversified listing of work experiences and hobbies and interests reflect a broad range of fascinating areas.

RECOMMENDATIONS:

Programming should be more sensitive to the requests and needs of the audience. Consider background of listeners more when selecting reading materials for entertainment, information and news purposes. (Example: short stories, sports coverage, editorials on local issues, etc.) In the past, many readings have appealed to Caucasian females that are middle to upper class, reflecting more the interest of our volunteers than our clients. Our audience is mostly male with a significant percentage of Blacks.

3. We presently have specialized SCS programming in the mornings from 8:30 a.m., to 12:00 p.m. and in the evenings from 5:00 p.m. until 7:00 p.m. Our audience response to the survey suggests that if we change our SCS specialized broadcasting hours, it would be more convenient for listening. They also do not like listening to repeated information.

RECOMMENDATIONS:

Begin morning SCS programming at 7:00 a.m. Interviewees expressed a desire to get their news earlier in the morning than we presently have it available. They would like to hear the news before they get out of bed and begin their day.

Do not run SCS programming and news from 5:00 p.m. to 7:00 p.m. Many people are engaged in family routines at this time of day or listening to the news on television. After 7:00 p.m. would be best.

Discontinue repeating of any programming, especially morning segments repeated in the evenings.

4. Our listeners have no program guide to keep them knowledgable of our schedule. Many interviewees expressed the opinion that such a guide would be most helpful.

RECOMMENDATIONS:

Develop and mail a program guide to our listeners. The SCS files contain information as to whether each client needs written materials in large print or braille.

5. The interviewees gave numerous suggestions for program elimination and expansion.

RECOMMENDATIONS:

Seriously review and consider client suggestions in the areas of elimination and expansion because excellent suggestions have been offered. Especially consider elimination of reading novels over the air because they are too long, many clients are not interested in the books selected, and many receive talking books.

6. Our listeners tune in for news more than any other topic area -- specifically state and local news. The survey results show almost an even split between those clients desiring more news and those desiring the same amount as we presently offer.

RECOMMENDATIONS:

More state and local news ... limit CNN. Much of our air time right now is devoted to CNN. Our listeners enjoy CNN but say it is mostly world and national news (which they can get from regular news broadcasts), it frequently repeats itself over and over again, and we have it on too much. Our listeners would like to hear CNN on a much more limited basis.

7. Maximum topics of interest for future programming are highlighted on pages 7 and 8.

RECOMMENDATIONS:

Review the higher categories carefully before establishing program changes. Also consider the important significance of the rating of Tony Brown's Journal when only one third of those interviewed were Black.

8. Special interest programming for the future exemplified positive feedback in this area.

RECOMMENDATIONS:

Continue usage of CNN but on a more limited basis. Expand programming to include coverage of C-SPAN and some Sports.

9. Weekend programming reflected mixed emotions. Presently we run CNN through the entire weekend. Most people do not listen to us on weekends due to family routines and the fact that we have nothing on but CNN. Many of those who would like to listen on weekends do not want to hear CNN over and over again, yet they feel that asking CenTeX to do special programming on weekends is a little too much.

RECOMMENDATIONS:

SCS staff needs to come together and brainstorm possibilities for weekend programming. There is a likelihood of increasing client listeners at that time if alternative programming to CNN is made available. Specifically examine client suggestions.

10. Many of our clients that have questions or comments about programming or their reception are out of our dialing area and cannot afford to call SCS long distance.

RECOMMENDATIONS:

SCS should consider obtaining a toll free number. This number could be placed on the program guide for client convenience and use.

11. The last SCS coordinator maintained communication and contact with our clients. Since her departure in December, the survey has been the only real continuance of this. It is important to the listeners that they know that we are here and that they are important to us. They like that little extra personal touch. It seems to add something to their lives that is very meaningful.

RECOMMENDATIONS:

Either an SCS person or volunteers should be involved in the process of keeping systematic contact going with our listeners. This type of contact would also reinforce our ability to maintain program and content evaluation on a more frequent basis.

12. A few of our former clients have died or moved away and we know nothing concerning the whereabouts of our SCS receivers for these people.

RECOMMENDATIONS:

An SCS person should be responsible for follow-through on client whereabouts and SCS equipment. This effort should be conducted with our technicians who deliver and service the equipment.

13. Two new program suggestions, from our clients, were of extreme importance and value to our audience. They concern two areas that are sensitive to the needs of our audience which we presently do not address.

RECOMMENDATIONS:

"Counseling for the Psychology of Personhood Program". Hope needs to be spoken to. Programs that deal frankly with the psychology of physical handicaps and that positively reinforce. A minister in the area is very much interested in assisting with or doing this program himself.

Rev. Richard Carter
5 Grove Avenue
Williamsburg, Virginia 23185
(804) 229-2451

"Black Achievements and Issues". Half an hour show done by Blacks about Blacks. SCS presently has no Black personnel or volunteers in its operation and only began subscription to the Tidewater area Black newspaper within the past few months. SCS presently has absolutely no programming and very little news which addresses the concerns and issues of tidewater's Black community. An Immediate effort on the part of SCS needs to take place to eliminate these inadequacies. We can not continue programming as though a certain segment of our population is invisible or the same as everyone else.

14. Almost half of the interviewees had problems with their radio receivers. Theyhad music, talking and/or static in the background. This discourages many people from listening to us more.

RECOMMENDATIONS:

SCS personnel and the technicians at CenTeX should work cooperatively in this area and develop a system for client radio receiver feedback and correction of the specific problems.

SCS SURVEY RECOMMENDATIONS AND RESPONSE

RECOMMENDATIONS

1. A person working with SCS should be assigned the responsibility of an all-out campaign for obtaining many more clients.

   Response: A full-time manager, Nancy Ross, was hired May 10, 1982, to oversee SCS operations. Duties include client recruitment.

2. Programming should be more sensitive to the requests and needs of the audience. Consider background of listeners more when selecting reading materials for entertainment, information and news purposes. (Example short stories, sports coverage, editorials on local issues, etc.)

   Response: More local news is being offered with the use of local newspapers like the Gloucester-Mathews Gazette-Journal, the Norfolk Journal and Guide, and the Norfolk Ledger-Star.

   News articles are being edited by the staff for length and content.

   The selection of books is reflecting our audience demographic and volunteers are currently taping books for fall use.

3. Begin morning SCS programming at 7:00 a.m.

   Response: Morning News programming beginning at 7:00 AM was effective 7/9/82.

4. Develop and mail a program guide to our listeners.

   Response: Program schedules are currently broadcast three times on week days. A Fall schedule will be mailed September 1, 1982.

5. Seriously review and consider client suggestions in the areas of elimination and expansion because excellent suggestions have been offered.

   Response: Listener's suggestions have been considered in SCS programming and the changes are reflected in the schedule.

6. More state and local news --- limit CNN.

   Response: Since the survey was conducted, CNN use has been reduced from 18.5 hours to 9 hours weekdays. The weekend schedule remains the same. Local news coverage has been increased by 2 hours daily utilizing 6 local newspapers as source material.

7. Review the listener's preferences carefully before establishing programming changes. Review the higher categories carefully, especially the rating of Tony Brown's Journal when only one third of those interviewed were black.

Response: All listener suggestions have been carefully reviewed. The program expansion suggestions have been acted upon with the following program additions and changes:

--program listings are being given over the air

--CenTeX evening program audio is being aired from 7:00-10:00 PM

--Articles of interest from "good" information sources are being prepared from the "Washington Post", "Prevention Magazine", "Reader's Digest";"Time Magazine" and from other magazines and periodicals as relate to the topics of interest indicated by the listeners.

--Counseling and hope are being addressed by a "Good News" program prepared by volunteers of the St. Bede's Catholic Church.

--Morning programming of local news begins at 7:00 AM.

--"What's going on with the government" is being addressed in the local news coverage and with use of C-Span (live coverage of Congressional proceedings.

--Editorials from local papers are a regular SCS feature.

--Coverage of local sports from black colleges will be featured in the fall programming addressed by members of the Elk's Club.

--"More information about black people" is provided with weekly readings from the "Norfolk Journal and Guide", local focus from the "National Scene" magazine and "Ebony". In addition, the local black Elk's Chapter has agreed to sponsor a regular volunteer group of readers for a fall program.

8. Continue usage of CNN but on a more limited basis. Expand programming to include coverage of C-Span and some sports.

Response: CNN use has been reduced from 18.5 hours to 9 hours daily Monday-Friday. C-Span is aired from noon-5:00 PM Monday-Friday. Sports coverage is given with a special half-hour program weekday mornings.

9. SCS staff needs to come together and brainstorm possibilities for weekend programming.

Response: Weekend programming is being explored and will be reinstated if additional financial support is found for that programming.

10.* SCS should consider obtaining a toll-free number. This number could be placed on the program guide for client convenience and use.

Response: Representatives of the "Telephone Pioneers" have been contacted to help SCS personnel evaluate the alternatives and associated costs.

11. Either an SCS person or volunteers should be involved in the process of keeping systematic contact going with our listeners. This type of contact would also reinforce our ability to maintain program and content evaluation on a more frequent basis.

Response: Volunteers are being utilized to contact clients with telephone calls and letters.

12. An SCS person should be responsible for follow-through on client whereabouts and SCS equipment.

Response: Property receipt forms are on file for all SCS receivers. The SCS manager assumes responsibility for follow-through on client and equipment location.

13. "Counseling for the Psychology of Personhood Program"

Response: The survey recommendation for this program was excellent. A program addressing this subject is being sought for the 1982 fall scheduling. a "Good News" program is being prepared by volunteers from the St. Bede's Catholic Church and a local black minister has volunteered to address the topic of "Hope".

14. SCS personnel and the technicians at CenTeX should work cooperatively in this area and develop a system for client radio receiver feedback and correction of the specific problem.

Response: This is currently under review by the SCS manager and CenTeX engineer. However, investigation to date indicates that the so-called "noise" interference is caused by environmental factors (such as room placement or electronic appliance use near the receiver). The problem has not been identified as an SCS circuit deficiency. Mr. Curtis has requested that the chief engineer continue the investigation of any complaints from listeners regarding "noise" problems. Already, several problems have been remedied with listener cooperation.

DOCUMENTATION SEVEN

CenTeX's SCS Survey Recomendations and Response

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DOCUMENTATION EIGHT

SCS Press Recognition

THE EASTERN SHORE NEWS

Publication No. 166,140 Vol. LXXXXV No. [illegible] ONLEY, VIRGINIA · THURSDAY, DECEMBER 22, 1981 3 Sections 48 Pages 30c

Grant Will Bring Programming To Shore

Centrex Will Explore Potential Of Television

By Bill Sterling

From a television studio in Williamsburg a professor lectures to 300 students in 115 locations. A student sitting in Eastville asks a question of the professor and is heard by classmates in West Point, Newport News, Norfolk and Virginia Beach.

A community volunteer reads The Eastern Shore News into a microphone. The blind listen at home on a special radio; the deaf read it on a teletype machine; the deaf-blind read it on a Braille machine.

Sounds like some futuristic mode of communication?

Not really. Such a telecommunications system is being used throughout much of the Tidewater area and will be arriving on the Eastern Shore in 1983 through a $489,322 federal grant that was awarded last week to a private, non-profit Williamsburg corporation.

The Center for Excellence, Inc. was founded in 1973 by John Curtis, a pioneer in railway and highway communications systems. Known as Centex, the network was formed to explore the educational potential of television. That potential appears to be limited only by finances and imagination. Curtis knows no bounds on the latter and is doing well backing those ideas with dollar signs.

Since 1975, when Centex was endorsed by Virginia's General Assembly and numerous state education and health commissions, the telecommunications network has received more than $8.2 million from local, state and federal sources for research, program planning and equipment. Private funds have also been supplied to the effort.

Curtis, who as President and Chief Operations Officer receives $1 per year, explains Centex's goal. "Costs of education continue to spiral upward at the same time voluntary support of public education is decreasing. Without more effective use of its educational resources, the nation may be unable to continue its long struggle for equal access to education for all of its citizens. One of the more promising ways to increase the geographic scope and effectiveness of America's educational processes appears to be the use of modern telecommunications."

With the announcement last week that Centrex has been awarded a $489,322 grant by the National Telecommunications and Information Administration, the network will add the Eastern Shore residents to the 1½ million people now within reach of its programming.

The grant will permit a receiving and transmitting station to be built in Northampton County by September 1983, says Curtis. A second grant will then be sought to serve Accomack County.

Centex installs and maintains the facility and makes its programming available at no cost to the taxpayers. The only expense incurred by the locality is the electricity to broadcast the programming.

The system offers 16 channels for use simultaneously. Each circuit is privacy protected, both for tuition-paying programs and for those programs, such as psychiatric treatment of medical diagnosis, where privacy is essential.

Curtis says Centex's programming is broadcast over cable systems where such service is available. Like the programming broadcast over the airwaves, cable offerings can also be privacy protected.

The Centex network also uses local FM stations as a subcarrier circuit to serve the blind, the deaf and the homebound, who require special formats to receive broadcast services. Curtis says plans call for that programming and the receivers to be available at no cost to Eastern Shore residents who qualify.

Centex is now broadcasting in the Williamsburg, York County, King William County, West Point County and James County areas, as well as in the cities of Newport News, Hampton, Norfolk, Virginia Beach and Poquoson. Stations are scheduled for completion at Richmond, Henrico and Petersburg in 1982.

Local School Board Involved In Planning

George W. Young, Superintendent of Northampton County School System, says his staff and Centex officials will meet next month to formulate plans for the system.

Young says the programming will be a tremendous asset for in-service training. Northampton County teachers will be able to renew certification and earn graduate credit by taking TV classes at their home sch before and after their teachin

In addition to having both and verbal two-way commun without the time and expe travel, classes that once we available due to a lack of stud any one location can now be by bringing numbers of st together by TV.

Young also says the televisi work offers excellent possibili the instruction of homeboun dents.

Young adds that Centex gramming will complement and taped broadcasts from the public broadcasting which serves the Eastern Sh

Education is just the begin what Curtis and others ho two-way television system used for. They see it as an ment in which to test telecom cations for use in [illegible] medical services and [illegible]

Carolyn Click

Gene Blatecky used a combination of American Sign Language and Signed Exact English in her volunteer role as an interpreter for the American Association for the Deaf-Blind.

Picture painted with hand signs

Your hands speak to me in meanings
Which words cannot express
Whether it be talk of love
Or simple signs of jest

They show a special meaning
In everything you say,
And I've learned to understand you
In this very special way

In a place where there's no hearing
You can put your heart with mine
We can wrap ourselves completely
In a world of loving signs

By Carolyn Click

If there is a universe of "loving signs," as the author of those unknown verses indicates, then Gene Blatecky is certainly one of its brightest stars.

Mrs. Blatecky, coordinator of deaf-blind services for the Center for Excellence, has worked for the past three years in a special project that would supply information via sub-carrier broadcasts to the deaf and blind in the Peninsula area.

Out of that service at Cen[illegible]X evolved a growing [illegible]gnition that the deaf suffer [illegible]ind of "invisible" handicap. "You don't just pass someone in the grocery store and tell that they're deaf," Mrs. Blatecky said. "They don't carry a white cane."

So Mrs. Blatecky elected to extend her job, which called for putting our news and special communications that related to deafness over the CenTeX system. She began learning the language of the deaf.

"When I started (at CenTeX) I didn't think it made any difference (to learn sign language)," she said. "The whole program was structured around listener response through surveys." But the deaf, who "listened" to the CenTeX programs through a TTY or teletype machine, often either didn't return the surveys or returned them showing obvious difficulty with language skills.

So Mrs. Blatecky decided to take several classes in sign language at the College of William and Mary, then went on to intermediate classes at Christopher Newport College and Gallaudet College in Washington, D.C., a school devoted to the teaching of the deaf.

Her Christopher Newport professor, Leslie Kidd, agreed to conduct an advanced 15-week seminar this year, and to improve upon those advanced skills, Mrs. Blatecky traveled to Gallaudet again two weeks ago to act as an interpreter at the Sixth National Open Convention for deaf-blind persons.

The convention, held June 20-27, hosted 150 deaf and blind persons from around the country, and required an interpreter for each handicapped person.

As one of those selected as interpreters, Mrs. Blatecky also participated in a two-day pre-seminar which taught such skills as mobility training, transportation assistance, and guidance.

"You had to sign and spell out everything," Mrs. Blatecky said, including each kind of food in the cafeteria line. The handicapped participants were also escorted around Washington, D.C., to such sites as the White House, the Hirshhorn Museum and Sculpture Garden, the Smithsonian Museum, and the National Cathedral, burial place of Helen Keller and Anne Sullivan Macy.

A molded face mask of Miss Keller, the first deaf and blind person to graduate from college, is an integral part of the cathedral displays, so convention participants were able to "feel" the feature of Miss Keller, Mrs. Blatecky said.

Her signing skills, mainly practiced in class and with a few friends in town who also know the language, were also put to the test, but Mrs. Blatecky noted that "I called home after the first day and said it was already worth it.

"It's hard to believe they can understand it," Mrs. Blatecky said, but through a variety of methods, including signing, lip-reading, and just plain shouting, convention goers "heard" speeches throughout the convention.

Throughout the speeches, two stage interpreters, one signing Exact English, and one using American Sign Language, which is a modified version of signing each word, faced the crowd, so that individual interpreters could also receive assistance if they stumbled.

Mrs. Blatecky, who uses what she refers to as "pidgin signed English," believes that "sign" should be taught in schools just as any other foreign language.

"Signing is a lot of painting pictures," she said. "It's very spatial. Nothing is left hanging in the open."

Sometimes, it is hard to interpret that picture because of the constantly changing language itself. Signs, like spoken words, change with usage, and some are discarded because they are out of date or added because of some new addition in English.

She welcomes the publication of a comprehensive dictionary "American Sign Language," by Martin L.A. Sternberg, because there is at last, the most extensive compilation of signs ever offered.

As for her, the limited number of deaf persons in the area prevents her practicing her language as much as she would like, but through her work with CenTeX and her membership in the Peninsula Club for the Deaf, she is assured at least of keeping her skills intact and providing some occasional assistance as well.

"The best thing is to find friends in the deaf community that you can get together and communicate with," Mrs. Blatecky said.

THE
VIRGINIA GAZETTE
Containing the freſheſt Advices, Foreign and Domeſtick.

Opinion

Jan. 14
1981

Martha R. Gravely .... Publisher
W. C. O'Donovan .... Editor

EDITORIALS

Ambitious CenTeX

Williamsburg recently got national attention with a cover story in the prestigious journal, American Education, published by the U.S. Department of Education.

Inside is a lengthy article on the Center For Excellence Inc., based at Berkeley Elementary School on Ironbound Road. In only six years, CenTeX, as it's called for short, has pioneered two-way television communication for the purpose of training teachers who deal with handicapped or gifted children.

Programs originate at Berkeley and are transmitted to schools all over the lower and middle Peninsula. The concept is a smashing success, allowing teachers to get top-of-the-line training through television without having to leave their own schools. It saves time and money, and it works.

From the article: "The three top state officials, five school division superintendents, three curriculum specialists, and other state officials interviewed or contacted in the course of writing this article were all enthusiastic about the accomplishments to date of the CenTeX system. All were excited about the variety of uses for the system and possibility for futher development."

In addition to training teachers, CenTeX is providing special news and features to people who are blind and deaf. The deaf and homebound receive news and other services six hours a day, while the blind receive additional entertainment through tapes of books run for them during the evening hours by 50 volunteers.

The innovative and energetic man behind CenTeX is 73-year-old John A. Curtis, who has background in electronics, publishing, motion pictures and computers — perfect for the job.

This stuff is expensive. $1.7 million from the federal government, $500,000 from the state, and $600,000 locally have been contributed to the program. Dr. J. Wade Gilley Jr., secretary of education for the state, said, "I am concerned with extending the network throughout Virginia and making it a permanent fixture."

Success stories like this should be kept in mind during the coming weeks when the new operating budgets are released for local schools and government. "Back to basics" is a slogan that to some extent has backfired on school administrations when citizens demanded a bare-bones school budget. Some room must be left for ambitious projects like those conducted by CenTeX, or we will be left with a generation of students who atrophied on the 3 R's.

Richmond Times-Dispatch, Wed., April 22, 1981

Videotape to Get Teacher to Class

Times-Dispatch State Staff

WILLIAMSBURG — While one piece of modern technology keeps Dr. George Grayson confined to his hospital bed today, another will make it possible for him to meet as scheduled with the students in his Government 201 classes at the College of William and Mary.

"I just need to be here with the antibiotics coursing through me," Dr. Grayson said good-naturedly as he lay yesterday in Williamsburg Community Hospital, where he has been hospitalized since Sunday to receive intravenous medication for an illness.

But with the help of The Center for Excellence Inc., a Williamsburg-based educational telecommunications system, the professor will be able to deliver a 50-minute lecture to two classes just the same.

CenTeX officials videotaped the lecture yesterday in Dr. Grayson's hospital room, and it will be replayed today on CenTeX monitors in a lecture hall at the college.

Dr. Grayson, a member of the Virginia House of Delegates said he hopes to be well enough tomorrow to meet with students in another class at the hospital board room — "if the students will come. That's the real question."

By Friday, he said, he hopes to be back in class as usual.

John A. Curtis, CenTeX founder, said the company was happy to provide its services free "to repay George Grayson for all he's done for us." Curtis, knowledgeable about educational telecommunications facilities around the nation, said it was the first instance he has heard of when a sick professor avoided missing a lecture by videotaping his presentation.

Dr. Grayson explained that he thought of the unusual procedure because it is late in the semester and there is little time left to schedule a makeup class.

Daily Press

Newport News-Hampton, Va., April 23, 1981

LECTURE TAPED

Sickness Won't Stop Class

By WILLIAM MATTHEWS
Staff Reporter

WILLIAMSBURG — George W Grayson sat back in bed in his polka-dot pajamas, nudged his glasses higher up on the bridge of his nose and prepared to lecture his class on the first amendment to the Constitution

"Before I launch into this lecture, let me remind you that we are in a hospital room and there may be nurses, doctors and orderlies coming in and out But we'll continue filming for as long as we can." Grayson said

Confined to a hospital bed, "I can't gesticulate the way I usually do," he said

Grayson pointed out a pole placed next to his bed to hold a plastic container and a long tube that lets antibiotic drip slowly into one of his veins "We've walked many miles together," he said of the pole

Grayson, a government professor at the College of William and Mary and delegate to the General Assembly, became ill with a "localized infection" last weekend and was admitted to Williamsburg Community Hospital, where, he said, "They are taking very good care of me."

With the end of the school year approaching and final exams looming, Grayson felt he couldn't take time out from teaching to be sick, so he gave his lectures from his hospital bed, where they were videotaped The lectures were played at 10 a.m. and again at 11 a.m. Wednesday at the college.

Although he looked a bit pale on the screen of a color television and he sipped periodically from a water glass, Grayson's voice sounded strong and humor crept in and out of his lecture.

As he explained Thomas Jefferson's thoughts on the separation of church and state, Grayson pointed out that Jefferson was "a graduate of William and Mary, and anything a graduate of William and Mary says must be taken very, very seriously."

Grayson cited case after case in which the Supreme Court struck down required prayers in public schools, but noted that the court has upheld references to God in legislative business and when printed on money.

His students scribbled notes furiously to keep up with the tape.

"I combined two lectures into one," Grayson said later.

"I should be out of the hospital by the end of this week," he said. He plans to give two lectures in the hospital's board room, and then be back in his own classroom by Friday.

The lecture was taped by CenTeX, a non-profit corporation for research and development of educational telecommunications.

John Curtis, director of CenTeX, said the taping cost "a few hundred dollars," and CenTeX absorbed the cost as a donation to Grayson.

"It was relatively simple to tape," Curtis said. "We were expecting some problems with noise," but they never occurred.

Your Neighbors *Williamsburg-James City County*

Ready, set, hit that light

JAMES CITY — It was reminiscent of the old "College Bowl" time on television — the fastest brains on campus pitted against each other in a battle to the end, to see just who had the best grasp of social studies.

The Battle of the Bobcats ended last week at Berkeley Elementary School, with three teams declared the winners.

Sue Foutz' class topped four other sixth-grade classes, Ed Ribock's class topped five other fifth-grade classes, and Roy Turner's class topped six other fourth-grade classes.

The Battle of the Bobcats, a televised, multi-round social studies quiz similar to "College Bowl," was conceived and put on by Miss Foutz' 32-member sixth-and seventh-grade language arts class.

The youngsters wrote the questions, based on the first three units of the social studies curriculum guide; served as announcers and masters of ceremonies for the 15 "battles," which lasted about 20 minutes each; designed the set and handled the Center for Excellence (CenTeX) television cameras and other equipment which beamed the programs throughout the school.

"It started out as a simple language arts project, but it just took off," says Miss Foutz. "We're going to try it again, and expand it even more, next year."

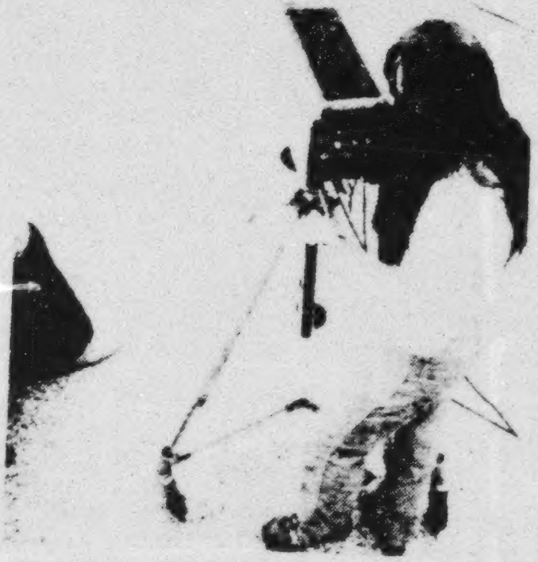
A confident team consults to come up with a consensus answer.

The Times-Herald, Thursday, June 4, 1981

BATTLE OF THE BOBCATS!

Staff photos
by David Pickel

Ooops. Clovis Braxton and Lynette Eugenis react to a wrong answer, but Lynette's consternation dissolves to joy with the next right answer.



Lynette Eugenis tapes fifth graders.

Samantha Moody hopes somebody's answer is wrong, and it is.

CenTeX tunes in for United Way funds by 1982

By Rebecca Clark

For the first time in its nine-year existence, the Center for Excellence (CenTeX) is asking local fund-raising organizations for money to help stay in operation. The Special Communications Service (SCS) division of CenTeX is in a particular bind because it is about to use up the last of an HEW grant that began in 1978.

Gene Blatecky, project coordinator of SCS, said CenTeX has applied to the Greater Williamsburg United Way. SCS also may have a chance at federal money funneled through the Virginia Department of Telecommunications, and the organization has applied for help from the United Way of the Virginia Peninsula.

CenTeX isn't included in the 1981 United Way budget just released, because their request is still under review. CenTeX may be considered in next year's budget, however.

The money from the state telecommunications office probably wouldn't be available until next summer. Already, SCS has eliminated three part-time jobs, leaving only Mrs. Blatecky to run the station.

There are approximately 1,500 people recognized as visually or aurally handicapped who would benefit from SCS programming if the project had enough special radios with the SCS frequency to go around.

Presently, only about 100 print-handicapped people have the special radios tuned to the SCS signal for daily news events.

For the deaf, SCS operates a teletype service that employs a telephone hook-up. About 40 deaf people in the SCS service area communicate over the teletypes and have the machines in their home.

In the beginning, SCS was viewed as an experimental communications laboratory. The 100 or so print-handicapped people currently served were a core group for SCS. Since the program has become so popular, Mrs. Blatecky said, "We're ready to grow." SCS can take on more clients if the equipment is available, she said.

The SCS service area lies within a 35 mile radius of Williamsburg and includes Hampton, Newport News, Gloucester, Poquoson and the Historic Triangle. Localities on the lower Peninsula are now experimenting with relayed signals from Williamsburg to provide communications for handicapped people in those areas.

SCS uses a signal off a subcarrier of WBCI on Ironbound Road, and leases it annually to broadcast programming 70 hours per week during the fall and winter. Summertime broadcasting is to be reduced to weekday daytime programming only.

The station is assured at least of staying on the air until next March, since the signal is paid for until then. The number of volunteer readers for the blind, about 35, is expected to remain stable. SCS will have enough programming for the summer thanks to a free tape exchange provided by the Associated Radio Reading Service.

SCS operates on about $80,000 annually. Virtually all of it has been HEW money, except for an approximate $12,000 grant last year from the Virginia Department for the Visually Handicapped.

Roger Thaler, chairman of the United Way admissions committee, said SCS just last week provided updated statistics on its listener demographics, and now the admissions committee has to go over it and make a recommendation to the executive committee of the United Way.

CenTeX provides news-reading services based on stories in local daily papers, including sports, features, editorials and world and national stories. Other types of programs offered on reel-to-reel and cassette tapes compose the bulk of SCS programming.

The Virginia Gazette, Williamsburg, Va., Wednesday, June 10, 1981

IRGINIA GAZETTE

CenTeX stands for communications excellence at school

By Jack V. Priest
Columnist

Without knowing it at the time, every physically handicapped and sensory-impaired person in the Williamsburg area was abundantly blessed on the day that John A Curtis moved here in 1972 It was less than a year later that Curtis established The Center for Excellence Inc in a small inconspicuous office in Phi Beta Kappa Hall

The Center for Excellence, a name perhaps unfamiliar to many area residents, is more commonly known as CenTeX. CenTeX is a Virginia chartered, IRS-approved, non profit, educational research and resource development corporation And if you think that's a mouthful, have a look at only a partial list of CenTeX's objectives

HIGH PRIEST

Among them are: To identify and define the major unfilled educational needs of the geographic areas which it seeks [illegible] serve, to develop the educational curricula, teaching capabilities and resources to meet these unfilled needs; and to make intensive use of modern electronic technologies, such as telecommunications, to increase the teaching effectiveness and the distribution scope of educational services

Considering how far CenTeX has come since its humble inception, it was astonishing to learn that John Curtis entered upon his ambitious undertaking alone It was not until 1976 that he had even one single paid assistant

Today, in addition to 55 to 60 volunteers, there are 10 full-time paid employees, but that number does not include Curtis. The founder and president of CenTeX derives no income directly or indirectly from his corporation, and he has at no time received a penny from it.

Why not? Is it unreasonable, regardless of how dedicated one is to a labor of pure love, to expect a little remuneration every now and then?

The man who spent most of his adult life in the communications industry, and later in the computer business before his retirement, answered with unassuming, characteristic modesty "All retirees should put back into society some of the things which society has given them "

A kind of gentle but paternalistic authority comes across when Curtis is talking, leaving his auditors in no doubt that here is a man who knows whereof he speaks. His speech is what TV announcers and voice and diction coaches call standard American, free of any sectional accent and assuredly devoid of the overtones of Brooklyn, where he was born in 1909

After a childhood divided between Hicksville, Long Island, and in the Catskill mountains, Curtis graduated from the Lawrenceville School, long considered by American educators as a paragon of prep schools. He rounded out his formal education by earning a B A degree from Yale University in 1930

CenTeX director John A. Curtis

In his long quest for educational excellence, Curtis found his brainchild experiencing growing pains in its cramped quarters at Phi Bete. CenTeX in its six years there had expanded in scope, personnel, equipment and function. In September 1979, it made its first and only move, to its present location behind Berkeley Elementary School on Ironbound Road. There, in the four temporary buildings formerly occupied by the Williamsburg-James City County Division of Pupil Personnel Services, CenTeX carries on almost all of its highly sophisticated educational and communications services.

Space limitations of the four buildings, which are actually double width trailers, necessitated setting up the CenTeX television station on the stage of the Berkeley auditorium. Acting as tour guide, TV production manager Scott Wheeler explained as he walked from the apron of the stage to the control room backstage, "From here all programming is telecast to receiving sites in individual schools in Williamsburg, James City County, York County, Newport News, Hampton, West Point and Poquoson."

The courses are telecast live to the systems, where the teachers can interact with the instructor and with each other via a conference telephone system. In addition, a mobile television van sends a TV picture of a class at one of the receiving sites to the instructor in the studio for "face-to-face" contact.

These telecasts are aimed at students who are in turn public school teachers, many of whom work with handicapped children "A great many of these teachers are studying for recertification," said CenTeX business manager Cliff Pence, "while others are taking courses for graduate credit."

Despite its striving for excellence, if not perfection, CenTeX is by no means elitist. It is, on the contrary, an almost unique example of education and democracy working hand in hand and complementing each other. As John Curtis put it, "We are interested in making the maximum use of modern telecommunications methodology and improving learning quality of all levels of education, including those required for the gifted and talented and high level professional, as well as that required for the factory worker and the sensory deprived population."

When John A. Curtis speaks, through the multiple voices of CenTeX, a whole lot of people listen.

Credit to Curtis

I was pleased to see the recent Gazette editorial outlining the significant contributions that Pete Renz has made to the community during his years as superintendent of the Williamsburg-James City County schools.

I would like to bring to the attention of the Gazette and its readers the fact that John A. Curtis of Walnut Hills Drive was solely responsible for the concept which eventually resulted in the establishment of CenTeX in 1974. Numerous community leaders endorsed the idea, but it was Mr. Curtis's technical knowledge of television's various capabilities, his conviction that that medium must be put to use in supplementing traditional educational programs, and his persistence in the face of what appeared to be insurmountable odds that accounts for the existence of CenTeX now as a provider of a variety of educational services

Stella Neiman
310 Burns Lane

For more on CenTeX, see High Priest below. —Ed.

October 1, 1980

C-2 Richmond Times-Dispatch, Thurs., Jan. 17, 1980

TV Series for Teachers Is Launched

By Wilford Kale

Times-Dispatch State Staff

WILLIAMSBURG — An unusual series of television seminars on education for gifted and talented students was launched yesterday for teachers and administrators in five Peninsula school divisions.

The 15-week course is the first instructional project outside of the special education field undertaken by CenteX (Center for Excellence Inc.), a Williamsburg-based non-profit organization that has received more than $2.4 million in the past six years to develop a two-way telecommunications system.

Working with the York County, Williamsburg and James City County, Newport News, Poquoson and Hampton school divisions, CenteX has created an audiovisual network to be used by students, teachers and administrators.

Network Operating

The network is in full operation in Williamsburg and Newport News and, according to a CenteX spokesman, stations are expected to be established in Richmond, West Point and Norfolk.

The concept provides for instructors to teach from a television studio at the center's facility at Berkeley School in James City County. The program is broadcast to public and private schools in the area, much like educational television.

How the system is being enlarged, and yesterday, 91 schools in the five school divisions received the initial gifted student seminar.

Telephone conference lines enable the instructor and teachers to hear questions asked at any location and to participate in discussions. Using mobile TV units, schools can have the two-way video service.

Project GETT-Up

The gifted and talented student course is part of project GETT-UP (gifted education via telecommunications: teacher-upgrade), and will feature 15 experts in gifted and talented education who will conduct seminars on Wednesday afternoons via the TV system.

Dr. Harold C. Lyon, director of the Office of Gifted and Talented in the U.S. Office of Education, presented the first session yesterday to nearly 250 teachers and administrators. Future sessions will deal with such topics as identification of the gifted, teaching strategies and curriculum planning.

The course is designed to allow participants to be eligible for graduate college credit through the College of William and Mary or for non-college toward teacher certificate renewal.

Project GETT-UP has been developed by the York County public schools and CenteX. Joan Byrne, York County coordinator for gifted/talented programs, developed the concept and is serving as the project's co-director. It is financed by a $54,266 grant from the U.S. Office of Education, under the auspices of the Virginia Department of Education and in cooperation with the Southeast Virginia Council for Gifted and Talented Education.

Video Cassettes

The telecasts will be edited and placed on vidio cassettes for distribution throughout Virginia by CenteX under the direction of the state Department of Education.

Until the development of this TV seminar system, the presentation of training "of this caliber has been limited to workshops presented at one location," Mrs. Byrne said. "Enrollment in such workshops is limited and the time and cost of participant travel are astronomical."

The CenteX system offers the opportunity for teachers and administrators in virtually unlimited numbers to participate right in their own schools, and the conference telephone network allows any participant to interact with the instructor and with participants at other classroom sites."

CenteX President John Curtis cited the success of previous and current CenteX projects dealing with special education and gifted/talented education at a luncheon meeting of program supporters.

Future Predicted

"Gifted and talented students are the youngsters who are going to solve our energy crisis ... and crises of the future," Dr. Lyon said. "This is the kind of program that will work and that we need."

He said education today must "fight against the lack of awareness that gifted and talented children can make it on their own. We must provide opportunities for these children to think for themselves while in the schools and to help themselves."

Dr. Jack Davis, state superintendent for public instruction, praised the CenteX effort, savings, "Unless we intercede for the gifted and talented children, we could find those same students" at the other end of the spectrum as emotionally disturbed children. "They must be challenged and given opportunities to achieve," he added.

This course, he said should help teachers better understand the needs and requirements of gifted and talented students.

Metro wrapup

GETT-UP will aid gifted students

WILLIAMSBURG — Teachers and administrators in the Peninsula's five public school systems are now able to participate in a series of television seminars dealing with education for gifted and talented students.

The course, which began Wednesday, is being offered as part of Project GETT-UP (Gifted Education via Telecommunications: Teacher Upgrade). It is being delivered to schools throughout the Peninsula by way of the two-way television system of the Center for Excellence in Williamsburg.

The course features 15 nationally recognized experts in education for gifted and talented students. They'll conduct weekly seminars from 3:15 to 5:45 p.m. on Wednesdays via the TV system from its studio site in Berkeley Elementary School, James City County.

The Times-Herald, Newport News, Va., Thursday, January 17, 1980

Unique Seminar Plays James City

By **FRAN KRZYWICKI**
Staff reporter

WILLIAMSBURG — A unique seminar to train Peninsula educators in teaching gifted and talented children premiered Wednesday at Berkeley Elementary School in James City County.

From the stage of the school's auditorium, gifted and talented education advocate Harold C. Lyon spoke to teachers seated on bleachers around him.

In front of Lyon a camera crew followed his every movement with closed circuit TV equipment.

Simultaneously, in 90 other Peninsula schools Wednesday afternoon, about 240 teachers collectively watched Lyon on their closed-circuit TV screens.

After Lyon's talk, teachers at each school hooked into a telephone network, allowing participants to ask Lyon questions or present their own viewpoint on gifted and talented education.

The unusual electronic media "classroom" for teachers is operated by the Center for Excellence Inc. (CenTeX) in Williamsburg

The seminar series on gifted and talented education is being beamed to 91 Peninsula schools, including the five school divisions and three private schools.

"It's, without a doubt, the only multi-media system of its kind in the United States," CenTeX President John A. Curtis said at a lunch Wednesday at the College of William and Mary, to inaugurate the new "telecommunications' seminar on gifted and talented education.

Developed by the York County gifted and talented program coordinator, the concept is to train educators in their own schools, through the use of the TV screens and telephone network.

The program was funded with a $54,000 grant from the U.S. Office of Education.

CenTeX, a non-profit corporatrion, is no newcomer to the Williamsburg area. In 1974 a pilot program the center started with the Williamsburg-James City County school division that provided teacher training in special education.

At that time, the Williamsburg-James City County CenTeX project received national recognition as one of the first of its kind in the country.

CenTeX officials say that since then they have received more than $2.5 million in grants to develop its two-way communications system.

Lyon, who is head of the Office of Gifted and Talented, a branch of the U.S. Office of Education in Washington, gave the first lecture in the seminar series Wednesday.

State Superintendent S. John Davis, who also attended the kick-off luncheon, said that "unless we intercede for the gifted and talented, those students will end up on the other end of the educational spectrum, (that is) the emotionally disturbed."

Other sessions of the seminar series, which will conclude April 30, will tackle topics like identification of the gifted, teaching strategies and curriculum.

Daily Press, Newport News, Virginia, Saturday, January 19, 1980

Transmitter Tower To Be Built In Spring

By **MARK MIDDLEBROOK**

Staff Reporter

WEST POINT — The construction of a television transmitter tower serving West Point and other schools is scheduled to begin in the spring, school officials announced Friday.

The tower, to be built and operated by the Center for Excellence, a Williamsburg-based, non-profit educational research and resource development corporation, will be built on West Point School grounds at a cost of $150,000 to $200,000.

The 249-to 299-foot transmitter tower will link West Point with three other transmitters in Norfolk, Williamsburg and Newport News creating the backbone of a two-way telecommunications network that will eventually stretch throughout the Tidewater area.

"We are the first small, rural school division to have such a transmitter," School Superintendent Stephen M. Baker said. "It's an honor that they would ask us."

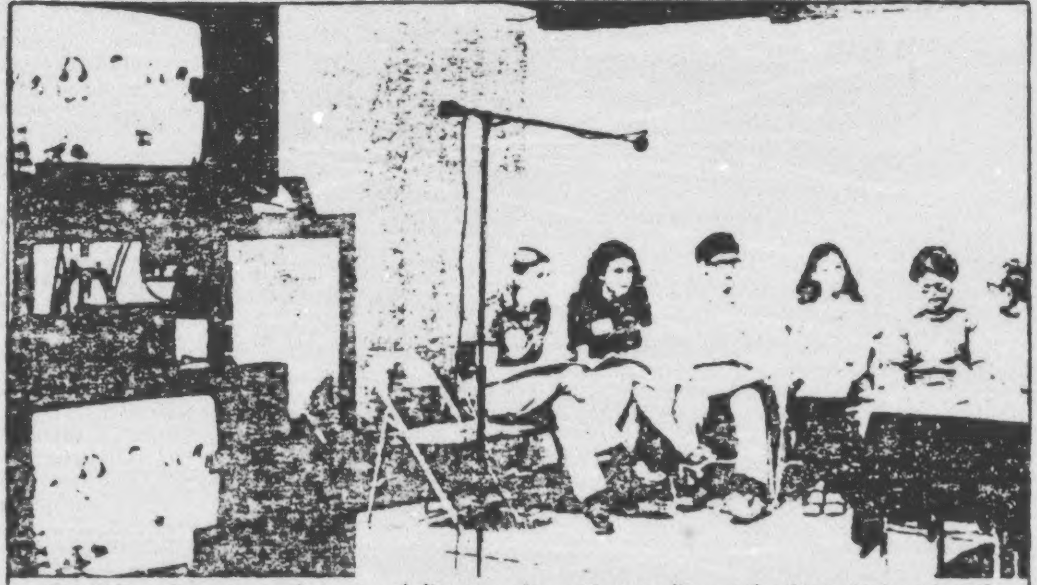
The network will have the capabilities of two-way audio and visual communication allowing a teacher to instruct classes in several different communities.

CenTex has received more than $2.4 million in grants the past six years to pay for the system. The Williamsburg and Newport News stations are already operating.

The West Point transmitter should be operating by fall.

Two-Way TV Brings Experts to School

by Virginia Gabriele



Dr. Sidney Parnes, professor and director of creative studies at the State University of New York at Buffalo (right), establishes rapport with (l to r) Celeste Koeleveld and Estelle Koeleveld, Denbigh High; Bard Bloom, Lafayette High; Jordana Zubkoff, Bruton High; Robert Kudlinski, York High.

WILLIAMSBURG — Three hundred teachers, administrators and parents across the Peninsula have just finished a unique series of seminars that brought 15 nationally recognized experts in the field of gifted and talented education into the local schools via two-way television.

Drawing on their extensive experience, the experts told the teachers how to identify gifted students, how to design programs and curriculum for the gifted, how to develop effective teaching strategies and how to evaluate the results.

Technicians ready set for filming of lecture geared at instructors of gifted children. The tapes will be made into a statewide library system for continuing assistance to the disciplines of instructing the gifted.

All of this was done live from studios at the Center for Excellence Inc. (CenTeX) in Williamsburg. The teachers, gathered in about 25 schools across the Peninsula, were able to ask questions via a telephone conference network. One group of teachers also had a direct two-way TV link with the studio.

Called Project GETT-UP (Gifted Education via Telecommunications: Teacher Upgrade), the seminars were developed jointly by CenTeX and York Public Schools under the direction of Joan Byrne, York County coordinator for gifted talented programs, and Dr. Denise DeWald of CenTeX.

The project was funded by a grant of $54,266 from the U.S. Office of Education under the aegis of the Virginia State Department of Education.

It was offered to public school personnel in York County, Newport News, Hampton, Poquoson and Williamsburg-James City County, as well as at the private schools of Walsingham Academy, Jamestown Academy and Peninsula Catholic High School.

Videocassettes of the 2½-hour broadcasts are being edited for distribution throughout the state. The edited videocassettes, accompanied by some written materials, have already been field-tested on 150 persons in Norfolk and Virginia Beach schools and have had a "very successful reception," according to Mrs. Byrne.

"The real value of the program is having those tapes available," said Byrne. "We can take it topic by topic and work with groups of teachers. It's not just a one-shot thing."

CenTeX has applied for additional funding from the U.S. Office of Education for national distribution of videocassettes and also to expand the course into a year, going into more depth in each area of gifted and talented education.

About 70 of the participants took the course for graduate college credit from the College of William and Mary, while most of the others used it for certificate renewal. One Tabb High School student who wants to enter the field of gifted and talented education also participated in the seminars.

"You can't measure the impact yet in terms of change in what the teachers are doing," said Byrne. "But people have gained ideas."

Several of the experts also attended dinner or lecture meetings or taped programs with gifted students, and one held a workshop with parents at Tabb High School.

This is CenTeX's first instructional project outside the field of special education. Since its formation in 1973, CenTeX has received more than $2.5 million in grants to develop its two-way telecommunications system and related programming. Further information: 229-8541.

The Virginia Gazette, Williamsburg, Va., Wednesday, June 11, 1980

Faith lights his world

By Jack V. Priest

After he earns his degree in urban studies at Virginia Union University, Ernest E. James Jr. may enter a graduate studies program. Still skirmishing with indecision, he at the same time admits that he's tempted to go directly from college to employment with a government agency assisting low-income families.

Ernest James, better known to his friends simply as Skip, has been very big on helping people for a long time now. He's the recipient of two letters of commendation from the Greater Williamsburg Association for Retarded Citizens for his efforts in coordinating and directing ARC's telephone advocacy programs.

Nine years of total blindness have perhaps given Skip a firmer grasp of the concepts of giving help and receiving help than could be expected from a sighted person. Skip had nothing but praise for CenTex (Center for Excellence), saying, "It did an excellent job for me. It has really been of great help."

He spent several months there, first at its location on the campus of the College of William and Mary and later at CenTex's present address, 1118 Ironbound Rd. He seemed concerned that so many citizens of Williamsburg know little or nothing of its existence or purpose. In the words of founder and president John A. Curtis, "CenTex is a non-profit, Virginia chartered, IRS-approved corporation which seeks to determine the educational, medical and social service needs of the area.

In other words, CenTex helps people like Skip James. VUU, where he's now in his junior year, has offered him a big hand up, also.

But the biggest morale factor in Skip's life is the Richmond college's basketball team. The Panthers, he will tell you as he swells with pride, are Division 2 National Champions in basketball. From the time he was a tiny tot, he said, it was his favorite sport. He played it well as a youngster, played it until cataracts attacked his vision at 13, but even after a series of operations that left him blind he "still throws a few at the basket every now and then."

Skip was born and reared in Williamsburg and still makes his home at 101 Douglas Dr. whenever classes in Richmond are not in session. He entered first grade at the old Frederick Douglass Elementary School, later called Magruder Annex, until the onslaught of cataracts. He was then enrolled at the Virginia School for the Blind and Deaf on Shell Road in Hampton.

Although there was nothing particularly remarkable about his early education, the next phase of it was unusual if not unique. He left the Hampton school four years ago when he was 18 and transferred to York High School just like any normal, sighted teenager.

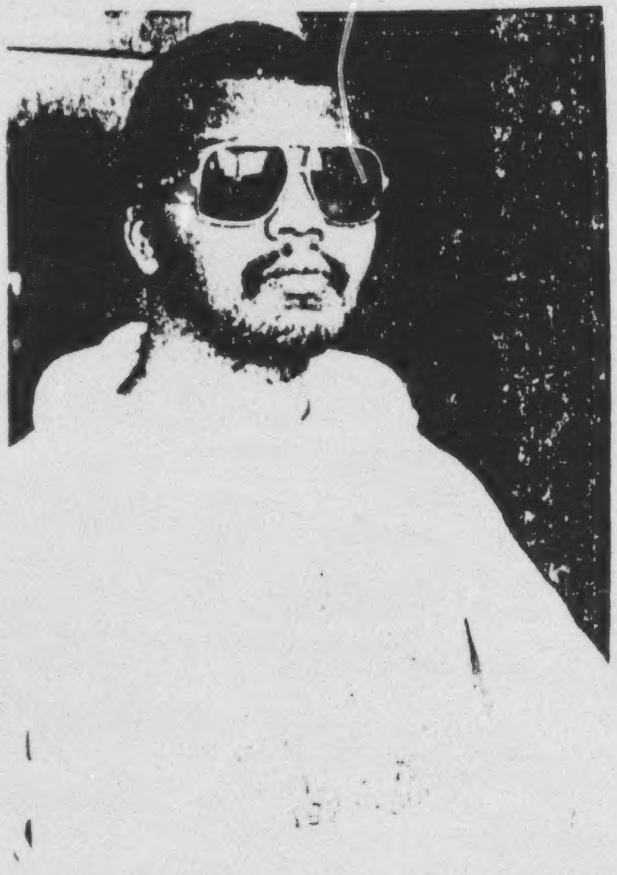
How difficult did he find it to function in a regular public high school with no special facilities for dealing with a blind student? "I'll admit it was a challenge, but I made out okay," Skip said. He made out okay enough to keep up his grades and was at the same time on the wrestling team, taking on sighted opponents in the [illegible] lb. class.

He transferred the following year to the newly opened Bruton High School, earned his diploma and was on his way to four years of college at VUU in Richmond. Classmates have frequently remarked that it's not often they meet a sightless student who avails himself of neither a Seeing Eye dog nor a cane. As for a guide dog, he said that he'd toyed with the idea for several months.

"The more I think about it, the better I like it," he said after giving the matter a moment's thought. "But as for a cane, no thanks. I did use one for a time. But no longer. I came into this world with two legs, and I don't need three."

Skip James is a profile in courage, a young man looking forward to another summer of work at Busch Gardens and looking forward to a long and gratifying future after that in his chosen line of work. And that's the term that he himself uses when discussing the future, "looking forward."

He sat stiffly erect in a chair in the offices of the Gazette as a photographer hovered around to take pictures. "I wake up smiling every day, knowing I'm going to make it a good day." His smile broadened. "Faith for today and hope for tomorrow," he added. "I don't ask for anything more."



Jack Priest

Skip James believes in three things: faith for today, hope for tomorrow and the invincibleness of his beloved Panthers of Virginia Union University.

Daily Press

Newport News-Hampton, Va., October 25, 1980

Anderson Wins School Debate

WILLIAMSBURG — John B. Anderson won a televised mock presidential election debate held by the Williamsburg-James City County school division here Friday.

Portraying Anderson in the debate, which was transmitted to the division's schools via CENTEX, was Bruton Heights' Elementary School sixth grader Daniel Fuchs.

Ironically, one of the judges, from the League of Women Voters, had to cancel her appearance.

Tuesday, the League will host a real presidential debate featuring Ronald Reagan and Jimmy Carter — but not Anderson.

Students will hold a mock election on the candidates later.

Quiet on the set, roll credits for . . .

News Tracks

The Times-Herald, Thursday, Dec. 11, 1980

By BILL McLAUGHLIN
Times-Herald Staff Writer

JAMES CITY — Children in every classroom at Berkeley Elementary School laugh when sixth grader Kathi Gillette tells the "joke of the day" from her seat on the stage of the school auditorium.

Question: "Why did the cow cross the road?"

Answer: "Because the chicken was off duty."

Kathi's audience is able to see and hear her in their classrooms via Center for Excellence (CenTeX) television monitors.

They pickup the Williamsburg area newest morning news show called "Berkeley News Tracks."

It's telecast live and unrehearsed from the auditorium stage at the school.

Soon, the temporary TV studio will be moved into a CenTeX trailer behind the school, when "Berkeley News Tracks" will be beamed to all seven Williamsburg-James City County schools, says Gene Bruss, the teacher who along with Principal Vincent Frilici, conceived the idea for the program.

The Joke of the Day segment is one of the most popular of the 15-minute show, which regularly includes an item of trivia, the day's cafeteria menu, national news, sports, school news, entertainment, weather, exercises, the pledge of allegiance and at least one special feature.

The special features may include guest appearances of children from other classrooms, awards — usually given by Bruss dressed in costume — recipes and book reviews.

The regular announcers are 12 of the 27 students in Bruss' reading class, all of whom are at or above grade level.

Announcers were chosen last month, says Bruss, after a series of TV tapes made others decide "they didn't want to be TV personalities."

"We had a lot of dry runs in the classroom before we went on the stage, learning how to perform on television," says Bruss.

"The children are responsible for the show. They write their own material. I don't edit it or even see it before it goes on the air. There are no rehearsals, it's a straight, live show.

When "Berkeley News Tracks" had its premiere in November, many of the announcers were highly nervous at the start of each program, but now they're "as relaxed as professionals," says Bruss.

He adds the program doesn't just help his students with their reading, but gives them practice in writing, editing and public speaking.

"We haven't even scratched the surface yet," says the teacher. "Tomorrow, we're going to include a creative commercial for an imaginary product. When we begin telecasting to the entire system, we'll have students come in from other schools to help with special features.

"And soon, with the help of CenTeX personnel, the children will begin operating the TV camera."

At the outset, Bruss and the children are "happy" to leave camera operation to the "real professionals," but they'll soon be learning that behind-the-scenes phase of television.

"Who knows, some of the children might even decide on a career in TV communication," says Bruss.

"Berkeley News Tracks" isn't the first time students have used the CenTeX system, which in the past has primarily been used for in-service teacher training.

A presidential debate, featuring student surrogates for Jimmy Carter, Ronald Reagan and John Anderson, was held shortly before the Nov. 4 election.

Bruss plans to inaugurate a televised spelling bee in the spring to "find the Berkeley champion" who will enter the national spelling bee sponsored by The Times-Herald.

Sue Foutz, another Berkeley teacher who has been instrumental in using the CenTeX system, plans to begin a televised game show, similar to "College Bowl," in the near future.

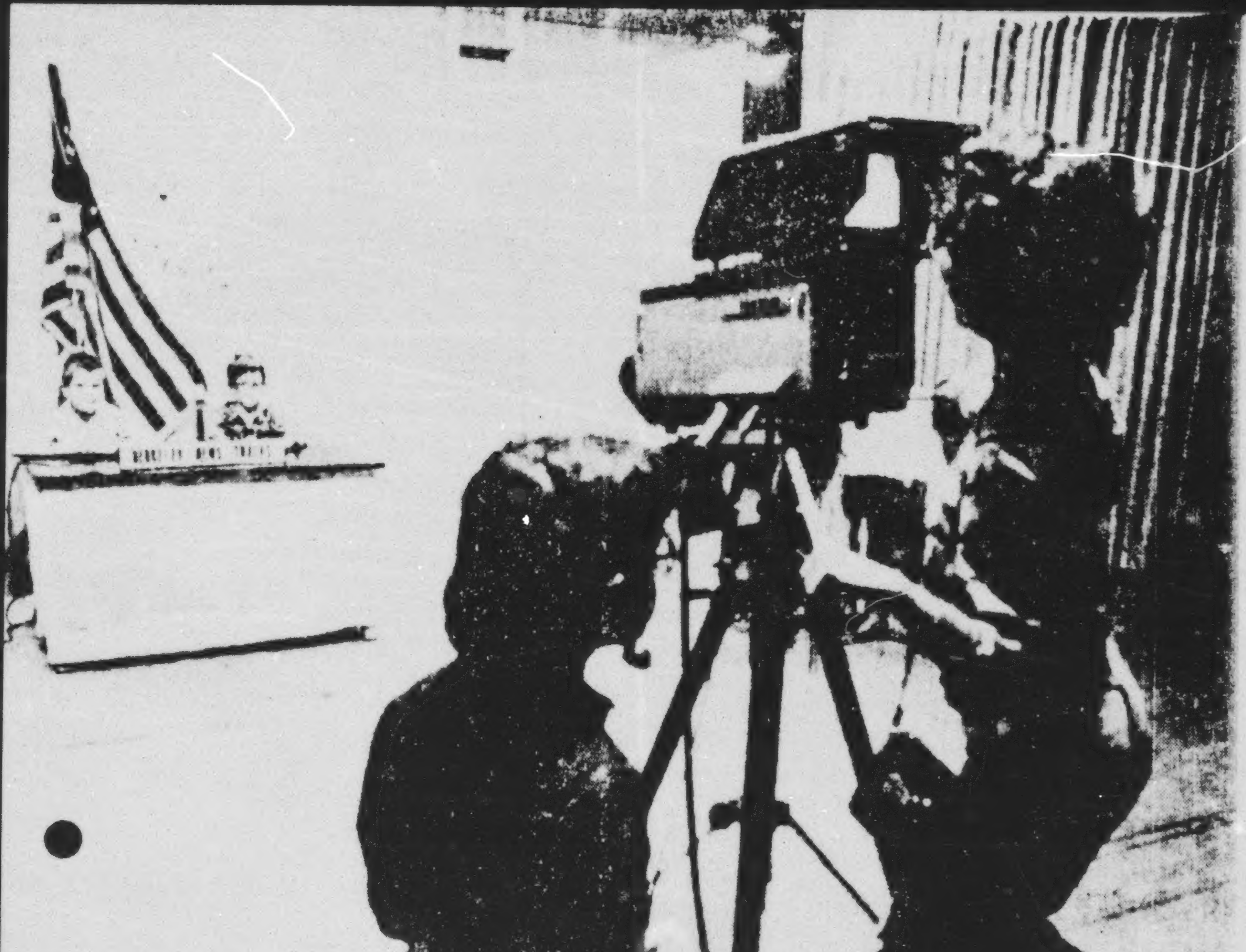
"We're just getting started," says Bruss.

On "Berkeley News Tracks," the announcers vary their subjects from day to day.

For example, in the same show Kathi Gillette told the Joke of the Day, the lineup was:

Scott Rutter, trivia; Ricky Smith, menus; Greg Pendleton, weather, Jared Moore, sports; Aaron Small, national news; Jim Sheridan, school news; Amanda Sandos, entertainment; Ramona Bartlett, exercises, and Lara Hoyle, Pledge of Allegiance.

The day's special event included a two reports: one by April Siemon on Student Council Association activities and another on "Santa's Shop" by Susan Lingerfelt, dressed as an elf.


Staff photo by JOE FUDGE

Berkeley Elementary School students prepare a "Berkeley News Tracks" show live and unrehearsed from the auditorium stage.

The Virginia Gazette, Williamsburg, Va., Wednesday, October 29, 1980

'Anderson' wins debate

John Anderson was the hands-down winner of the mock Presidential debates held at Berkeley Elementary School last Friday, Oct. 24.

Seven students in the Berkeley and Bruton Heights gifted and talented program, PRISM, assumed the roles of the three major party candidates — Reagan, Carter and Anderson.

Students at the two schools have been following the election process very closely by reading newspapers, magazines and pamphlets, and watching the news every evening.

SCHOOL NEWS

Children from both schools submitted questions to be asked of the candidates during the debate. Although the student candidates were well versed on their respective candidate's views, they still had to respond to the questions "cold," as in a regular debate.

Henry Renz, school division superintendent, Gail Hood, school board member, Wayne Block, WBCI news director, and Merry Feyock, PTA Council president served as judges for the event. They watched and listened to each candidate closely, judging them on poise, delivery, and accuracy of information.

Bonnie Rifkin, PRISM resource teacher for grades 4-6, served as the panel moderator. The event was made possible by the Centex staff who designed an elaborate set for the debate and telecast the debate for other interested schools.

Daniel Fuchs portrayed John Anderson in the mock Presidential debates at Berkeley Elementary School last Friday.

TIMES HERALD Dec. 18, 1980

• The Center for Excellence (CenTeX), an educational telecommunications research and resource development organization, and Hampton Roads Edcuational Telecommunications Inc., which operates WHRO-TV and WHRO-FM, have agreed to establish a coordinating council.

The council will recommend cooperative projects to the boards of directors of the two non-profit corporations.

WHRO and CenTeX provide complementary telecommunications services to area school systems, colleges, universities and the general public of southeastern Virginia.

The Virginia Gazette, Williamsburg, Va., Wednesday, May 16, 1979

10 HONORED BY CENTEX

The Center for Excellence Inc., known as CenTeX, honored 10 individuals, one posthumously, during a luncheon on the William and Mary campus May 11.

Three recipients of the five-year award plaques are members of the College of William and Mary administration and faculty. Thomas A. Graves Jr., college president, George R. Healy, academic vice president, and George W. Grayson, Delegate to the Virginia General Assembly and professor of government, were cited for their continuing support. Richard B. Brooks, former dean of the School of Education at William and Mary, also was honored for his help in "giving CenTeX its first 'home' at the college.

PEOPLE

The late Richard Gifford, who was an engineer and vice president of the General Electric Company and a member of the state board of education, received a posthumous award for "bringing technical integrity to CenTeX's system planning and credibility and expertise to CenTeX's operations."

Three superintendents of schools, Henry A. Renz of the Williamsburg-James City County system; Donald S. Bruno of York County; and Don R. Roberts, who recently left the Newport News system to become secretary of education in Arkansas, were honored.

Two area mayors, Vernon M. Geddy of Williamsburg and Vincent J. Thomas of Norfolk, were cited for their participation in the original establishment of the CenTeX system. Geddy was CenTeX's first board chairman.

CenTeX is a non-profit corporation providing futuristic telecommunications delivery technologies for schools, hospitals and social services in the Tidewater area.

The Virginia Gazette, Williamsburg, Va., Wednesday, May 30, 1979

Here's a unique way to go to college

Laid up with a back injury, one sophomore at the College of William and Mary feared she would have to drop out of school.

Instead, the college drops in on her via a unique two-way television system whose components are delivered to her bedside by a van, each school day from the campus 20 miles away.

AT THE COLLEGE

And unlike standard educational television, she can talk to her instructors, who see and hear her as well as she does them.

This innovation, called "mobile interactive TV," is the latest development of the Center for Excellence (called CenTex for short). Centex is a non-profit educational and resource development corporation located on the William and Mary campus.

Using TV transmitters and down-converters, Centex beams educational programs to people up to 20 miles away.

Centex has the distinction of being the nation's first telecommunications laboratory. It emanates from a two-story television studio and production center in Phi Beta Kappa Hall.

"We selected William and Mary as our site principally because the 550-square mile peninsula area contiguous to the campus is a near-perfect microcosm of American society," said John Curtis founder of Centex. "It gives us nearly ideal field laboratory conditions."

But bringing classrooms to shut-ins is only one segment of CenTex's scope. Other applications stagger the imagination; putting psychiatrists in touch with their patients, providing expectant mothers with practical tips on prenatal care, even routine "visits" to the chronically ill and aged can be accomplished via CenTex's systems.

Programs are broadcast on any of 28 UHF channels provided by the Federal Communications Commission. These channels do not interfere with commerical broadcasts, and can be picked up on specially modified television receivers.

CenTex's two-way TV system needs only five parts; a TV studio, two-way transmitter link, main transmitter, two-way receiver sites and the mobile van. The studio itself needs only two color cameras; one for close-ups, the other on the instructor. A conference phone allows the student to communicate with the instructor the same as if they were in a classroom.

"Right now our TV classroom on wheels is unique," Curtis notes, "but it's only a matter of time before the rest of the country applies it to their needs.

"Professionals, such as doctors, lawyers and engineers, can receive their continuing post-graduate education without leaving their offices, while members of the general community can obtain an education or even a medical checkup in their homes."

Curtis founded CenTex because he knew that technology, which was developed by education, would someday have to do an about-face and develop education.

"There are 21 million Americans who are currently educationally deprived," says Curtis. "Telecommunications is the fastest, cheapest and most accessible method of reaching them."

Included in the 21 million are the three million Americans who are deaf, dumb or blind. At least half of them, says the CenTex research team, are not getting a proper education.

DAILY PRESS, Newport News, Va., Tuesday, July 3, 1979

CenTex Given $175,000 For TV Tower

WILLIAMSBURG — A William and Mary-based educational research firm has received another $175,000 in federal money to continue its pioneering efforts in using electronic technology for educational purposes.

The Center for Excellence Inc. (CenTex) will use the money to construct a television tower in Norfolk so that teachers in that city and outlying areas can take televised two-way courses in special education, said CenTex founder and chief operations officer John A. Curtis.

This grant brings to $1.3 million the amount of federal money the firm has received for its work which began here in 1976 and is aimed in part at putting to work federal requirements for the education of the handicapped.

The Norfolk tower will be CenTex's third. Towers are already located in the Williamsburg area, where broadcasting began more than a year ago, and in Newport News, where broadcasting should begin by the time schools open in the fall.

Curtis said he believes construction of the Norfolk tower, to be built somewhere in the southern half of the city, will be completed by February 1980. It will permit broadcasting special education courses throughout Norfolk, Virginia Beach, Chesapeake, Portsmouth, part of Suffolk and Isle of Wight County.

The Norfolk station is one of five "backbone" stations CenTex officials hope to build in the next three years. The towers would stretch from Norfolk to the eastern edge of Richmond. Other "rib-stations" would broadcast to schools as far away as the Eastern Shore, Tappahannock and Emporia.

The order in which these stations would be built has not been determined, Curtis said.

The courses are offered to teachers in their schools immediately before and after regular school hours. They are taught by members of the William and Mary faculty and may be used to renew teaching licenses. The technology which CenTex uses permits students to question teachers about lectures.

In a related development, CenTex officials said the firm will move its operations from Phi Beta Kappa Hall on the William and Mary campus to trailers behind Berkeley Elementary School this summer, in accordance with the firm's contract with the Williamsburg-James City County school system.

FOR EXAMPLE, the first program to be aired from the Williamsburg station, which instructs schoolteachers in how to work with handicapped children, was begun, said Curtis, because extensive studies showed that most Williamsburg area teachers lacked such training.

"It was the most important unfulfilled educational need in the Peninsula of Virginia," he said.

Now in its third year, the project consists of 14 courses taught by college education professors to local teachers who upon completion of the course receive college or teaching recertification credits.

But instead of the teachers who may live 20 miles away driving long distances to attend a professor's lecture, Centex allows them to commute to their own schools where a television set and a conference telephone allow them to see, hear and question their instructor. The instructor can see the students by way of a portable black-and-white camera which is delivered to each of the schools by a Centex van.

ACCORDING TO CURTIS, this arrangement reduces the traveling time and cost to teachers while it does not diminish the effectiveness of the instructor.

For providing in-service teacher training courses, Curtis said state and local authorities will pay Centex $3 for each student taught. Citing financial projections compiled by Centex, Curtis said this $3 fee and the abundance of teachers who could take Centex courses in the Peninsula area should easily allow Centex to cover all of its operating expenses once its Norfolk station becomes operational in February.

So far teacher response to Centex is good, according to Curtis

C-2 Richmond Times-Dispatch, Thurs., July 5, 1979

Man Trying to Repay Education Favor

By George Stukenbroeker
Times-Dispatch State Staff

WILLIAMSBURG — When John Curtis talks about education, the conversation inevitably returns to the schoolhouse he attended in upstate New York with its one teacher and 23 pupils.

"The teacher decided three of us should go on to college," he said, "and I was one of them."

Today, Curtis, 70, a computer and telecommunications expert, still appreciates the chance he was given to continue his education, which he believes allowed him to become "a happy and self-reliant human being."

THE 1930 YALE GRADUATE is attempting to give others a chance to enrich their lives through education by making it easier and less expensive for people to receive instruction through the use of electronic technology.

Curtis began his efforts in 1973 when using his technological expertise and $150,000 in privately contributed funds ($40,000 from his own pocket), he established the Center for Excellence, which he describes as "America's first telecommunications laboratory."

Based in Williamsburg, Centex is an expanding non-profit corporation for which Curtis is chief operating officer.

THOUGH HE WORKS more than 55 hours a week for the corporation, Curtis does not accept a salary. "I've never gotten a dime back from it," he said.

Instead Curtis feels the gratification he receives by seeing his plans broaden educational opportunities is enough to make his contributions to Centex "worth it."

Curtis outlined those plans in a 1968 paper, which began by explaining how society's educational needs are not being met by the existing schooling system.

Curtis believes "barriers" such as time, geography and cost are preventing major segments of the population from increasing their education.

Curtis, therefore, devised plans for a network of broadcast stations stretching across the United States that would use a variety of technological innovations, principally television, to reduce these barriers.

TO PROVE THAT such a national network would work, Curtis sought to establish one on a miniature scale. After studying areas all over the country, Curtis decided that the Peninsula region of Virginia represented almost a "near-perfect microcosm of American society."

Studies showed "the Peninsula to be a typical social, economic and ethnic cross section of America," said Curtis.

Curtis hopes to have 15 stations open by 1985. The only one in operation is at the College of William and Mary's Phi Beta Kappa Memorial Hall.

With a staff of 24 it produces three programs. One program uses television to educate unwed mothers who have children suffering from learning disabilities. Another uses radio to provide the blind and homebound with daily accounts of current events. The third uses television to train schoolteachers to recognize and deal with the needs of handicapped children.

THE PROGRAMS ARE FINANCED by yearly grants from the Department of Health, Education and Welfare and receive support from state and local departments of education.

"The reason why we've been given more than $1 million by the federal government [over the last four years]," said Curtis, "is because what we've been doing will have value to the rest of the country."

"I know we're right, but we have to get others to think we're right," he said.

But while Curtis was able to convince the federal government of Centex's potential, he had to fight to get state money for his system.

T-D Photo

John Curtis Is Centex Chief of Operations
Telecommunications Expert Accepts No Salary

FIVE YEARS AGO he requested financing from the Virginia Public Telecommunication Council, which oversees the state's public broadcasting stations, and was turned down. The VPTC not only refused to provide funds for Centex, according to Curtis, but also declined to endorse it as a new concept in educational technology.

"They were afraid we would get public dollars that they wanted," Curtis contended. "Their primary interest is in fostering public broadcasting, not public education," he added.

But, according to Curtis, a Centex station is 20 times cheaper to operate than one for public broadcasting and can develop programs to cater to the needs of specific minorities in its 20-mile range, while, by law, a public broadcast station's programming must be for general consumption.

Furthermore, Curtis said, Centex is meant eventually to be financially self-supporting while public broadcasting "has never paid for itself."

COUNCIL, Curtis went before the House of Delegates' Committee on Education to argue for Centex in 1975. His efforts proved successful as the House eventually passed a resolution ordering the council and the Virginia Department of Education to study and submit a report on [illegible]ex to the governor by N[illegible]er 1975. The two groups' [illegible]quent report was favorable and center was cleared to receive state money.

Curtis said that he maintains an open offer to the state to take over complete control of Centex. "Anytime the commonwealth wants to take over Centex they can," he said. "The only two requirements are that it must remain non-profit and they must promise to keep it going."

Curtis emphasized that, as new Centex stations open, they will attempt to identify the "grass-roots educational needs" of the region to which they broadcast.

Con't

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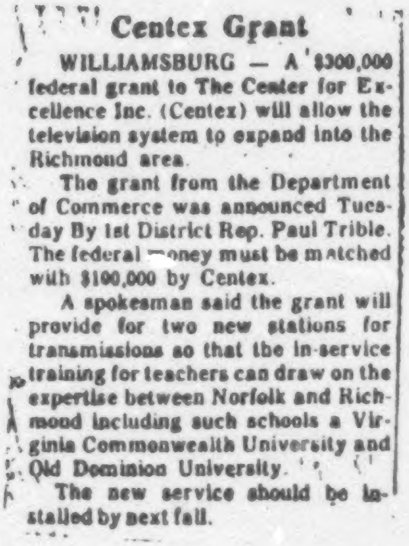
DAILY PRESS, Newport News, Va., Wednesday, Sept. 26, 1979



Centex Grant

WILLIAMSBURG — A $300,000 federal grant to The Center for Excellence Inc. (Centex) will allow the television system to expand into the Richmond area.

The grant from the Department of Commerce was announced Tuesday By 1st District Rep. Paul Trible. The federal money must be matched with $100,000 by Centex.

A spokesman said the grant will provide for two new stations for transmissions so that the in-service training for teachers can draw on the expertise between Norfolk and Richmond including such schools a Virginia Commonwealth University and Old Dominion University.

The new service should be installed by next fall.

The Virginia Gazette, Williamsburg, Va., Wednesday, October 3, 1979

Centex receives $300,000 grant

A $300,000 grant from the U.S. Department of Commerce has been awarded to The Center for Excellence at the College of William and Mary to expand their two-way telecommunications system.

The grant, to be matched by $100,000 from Centex, was announced last week by 1st District Rep. Paul S. Trible Jr.

According to John A. Curtis, founder of Centex, the grant will be used for the development of the "backbone" of the multi-channel, mutli-service public telecommunications network. That network now provides in-service teacher training, medical and social services.

The new grant will extend the network to the Richmond area and cover the counties and cities between Williamsburg and Richmond.

Curtis said Centex has also applied for additional grant money to open up channels along the north-south corridor of Virginia. These "ribs" would include such areas as Petersburg, Hopewell, Dinwiddie County, Sussex County, Surry County, Emporia, Greenville, Mathews, Northampton County and parts of the Eastern Shore.

DAILY PRESS, Newport News, Va., Thursday, Oct. 4, 1979

Centex Grant

WILLIAMSBURG — A $171,000 grant from the Department of Health, Education and Welfare will finance the first half of a project planned by the Center for Excellence Inc. to determine needs and develop a curriculum for special education training.

The grant was announced Wednesday by 1st District Rep. Paul Trible.

A spokesman for Centex said the center will conduct a national study to determine the special education cirriculum needs of schools of education which are interested in preservice special education training.

A curriculum will be developed based on the needs determined by the study.

The 20 month program will develop the curriculum to make maximum use of telecommunications including everything from satellites to the regional distribution system operated by Centex in Tidewater.

THE TIMES HERALD, Newport News, Va., Wednesday, Oct. 10, 1979

Special education aided by TV

By JEFFREY LAIGN
Times Herald Staff Writer

Hampton teachers are learning techniques for instructing students with special educational needs by means of closed-circuit television.

According to Dr. Joseph Lyles, assistant superintendent, all 36 city schools and one administrative building now receive instructional programs from Center for Excellence Inc. (CenTeX), a nonprofit telecommunications organization in Williamsburg.

"This is going to be quite a hook-up before it's over with," says Lyles of the project funded by a $74,000 state grant.

"This (grant) money provides for TV sets and costs of all the electronic amplifiers and scramblers to connect up with Warner Cable."

Lyles says total cost to Hampton includes $180 for cable installation and about $500 per year for electricity.

Since a receiving antenna has not been erected yet in Hampton, Lyles says, programs are beamed from Williamsburg to a Newport News antenna and rechanneled to Hampton via Warner Cable.

Although 18 programs have been developed, six are now available for use by teachers. Topics include techniques for teaching handicapped and emotionally distubed children, and for dealing with parents and other teachers.

Many of the programs are broadcast after the school day ends so teachers can watch them before they go home. They are not required to watch the shows, however.

Lyles says Poquoson, Williamsburg and York County school systems also have plugged into the CenTeX system.

CenTeX officials say Norfolk will begin receiving the programs in June. Virginia Beach, Chesapeake and Portsmouth schools will participate within the year.

After Hampton's tower is built this spring behind Mary Peake Annex, Lyles says CenTeX will transmit educational programs to the Eastern Shore.

Although state funding for the $25,000 tower has not been guaranteed, he says "CenTeX is trying to negotiate that," and confirmation seems likely.

The tower will make two-way video transmission possible, enabling a teacher viewing the program to be seen by and to communicate directly with instructors in Williamsburg.

Now, teachers who watch have a phone, and if they have a question, they call the Williamsburg station number.

Lyles says the system also will provide a direct communications link between the school system's central administration and individual schools. During emergencies, all Hampton schools simultaneously could be contacted simultaneously.

When the contract with CenTeX was presented to Hampton School Board in July, some members were wary. Consequently, officials contacted a school system that had been using a similar media service for several years.

According to the Birmingham, Ala system, the service had proven invaluable in disseminating information between administrative offices and schools and in providing instructional information for teachers and students.

First proposed in 1973, CenTeX is the only such facility in the state, the brainchild of retired inventor and engineer John A. Curtis.

Curtis, 70, obtained federal funding for the project in 1976 after three years of lobbying. He said then he believed CenTeX represented the world's first intensive use [illegible] telecommunications to provide special education services.

"I've been interested in television and computers all my life," he says, "and my first wife was interested in PTA work and Board of Education work."

Although CenTeX is staffed by 20 full-time paid employees, 60 volunteers and "many part-time employees including instructors, none of us (directors) including myself has ever taken a dime out of it," he says.

"You'll find it's going to be as useful to the Hampton school system as it has been elsewhere," Curtis says.

King William Plans To Join TV Program

By MARK MIDDLEBROOK
Staff Reporter

KING WILLIAM — The King William school division is going into the television business.

The King William County School Board recently approved a contract with the Center for Excellence, a Williamsburg based non-profit educational research corporation, to establish a 300-to 350-foot television transmitter at King William High School.

King William will be the fifth "backbone station" in the educational network, School Superintendent Dr. Stephen M. Baker said.

The West Point school division has also joined the network and is planning to build a 249-to 299-foot tower at the West Point High School.

CenTex has transmitters in Newport News, Norfolk and Williamsburg.

John Curtis, executive director of CenTex, said the goal of the center is to establish an educational communications network from Norfolk to Richmond.

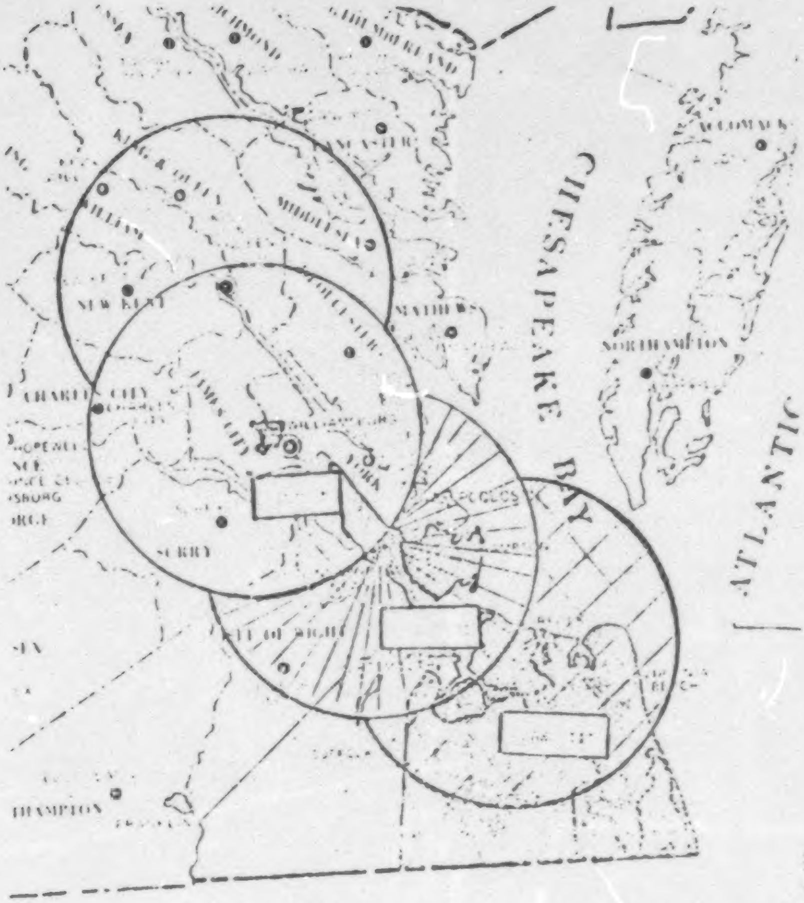
Baker said King William was not originally part of CenTex's master plan for establishing the system, but the 50-acre campus at King William High School sits on a ridge and provides a good location for beaming television into Richmond.

The high school's designation as a backbone station means that it will have the ability to transmit programs as well as receive them.

Baker said studio space will be provided in the high school and will be payed for by state and federal grants.

The schools will be able to transmit three hours of local programs a day and Baker said King William will broadcast special education programs for teachers.

Construction on the tower is expected to be completed in July. CenTex has a Department of Commerce grant to build the tower, which will cost $150,000 to $200,000.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WESTMORELAND
KING & QUEEN
MIDDLESEX
NEW KENT
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GLOUCESTER
CHARLES CITY
JAMES CITY
WILLIAMSBURG
YORK
SURRY
ISLE OF WIGHT
HAMPTON
CHESAPEAKE BAY
ACCOMACK
NORTHAMPTON
ATLANTIC

TIDEWATER REVIEW

Two-way TV tower in West Point to extend network

By JEFF BYRD
Tidewater Review Staff

What is now a vacant patch of grass behind West Point Elementary School will soon balance a 249-to 299-foot-tall transmitter tower which will extend two-way television from Norfolk to upper King William County.

West Point School Board Chairman Edwin Merrell signed a contract Dec. 14th to allow the construction of the fourth "backbone station" in a network of two-way audio and visual educational television.

The system's founders hope to broadcast, from studios at each backbone station, on the 28-megahertz channels provided by the Federal Communications Commission (FCC) for Instruc[illegible]levision Fixed Services.

They hope to strategically place "rib station" towers, which will broadcast over 20-mile radiuses each, to cover all of Tidewater Virginia, from Norfolk to Tappahannock, and from Dinwiddie to Accomac, on the Eastern Shore.

Merrell, Superintendent Stephen Baker, and Sharon Turshen, special education director, held a press conference last Friday to announce the new educational service, which will go "on air" next fall.

Two-way television is coming to the watery part of Virginia through the auspices of a non-profit corporation, CenTex, and government grants provided to upgrade special education.

According to press releases of CenTex, the system is one of the first in the nation to begin exploring the educational potential of television.

Congress began giving grants for educational television broadcasting facilities in 1962.

But, according to CenTex founder and Chief Operations Officer John A. Curtis, most funding has gone towards public television, which seeks to provide programs of general cultural and informational interest.

This was not the intent of Congress, Curtis argues in an article published in "Educational and Industrial Television."

Curtis founded CenTex to meet what he sees as the real intent of the legislators by providing specific educational programs for local school systems, he explained.

The local two-way system has the advantage of offering low-power, inexpensive TV in which people in an area can visually and verbally communicate back and forth without traveling at all. Classes which once could not be offered, due to a lack of students at any one location, can now be offered by bringing numbers of students from many locations together by TV.

The system offers 14 channels for use simultaneously, and each is private. Receivers must be installed to tap into the educational airwaves broadcast by CenTex.

A study, conducted by Curtis's organization, showed that special education, mandated to localities in 1972, is the area in which the most educational needs exist.

The construction of towers in Norfolk, Newport News, and Williamsburg has been funded at a cost of over $2.7 million, under state and federal grants, to give in-service training to professional and para professional special education personnel.

The classes will be broadcast from studios operating in Phi Beta Kappa Hall, on the campus of William and Mary.

During 1978, over 150 teachers and administrators, located in 10 different schools throughout James City and Williamsburg, took TV classes in the hours just before and after school.

Teachers taking a class were able to stay in their own classroom, yet communicate with their instructor, and others taking the course in other locations, as quickly as if they were all in the same room.

Besides in-service training for teachers, the television network founders hope to provide guidance to parents of handicapped children, diagnostic and prescriptive services, and direct services to the children, including entertainment, especially for the homebound.

Education is just the beginning of what Curtis and others hope the two-way television system will be used for. They see it as an experiment in which to test telecommunications for use in rehabilitation, medical services, and social services.

The CenTex system could bring cable television to West Point and area residents, someday, School Board Chairman Merrell pointed out.

With studios to also be housed on West Point school grounds, the town could get into community programming, Merrell added. "The tower could possibly be used for an FM tower, or to pick-up cable television, or for us to put our own special education antenna up on," he explained.

A 20-year contract with CenTex, however, provides that the Williamsburg-based non-profit firm must approve any other than educational plans.

Baker said he will apply for a grant to expand the current construction project at West Point Elementary by 1,500 square feet. This would allow the entire West Point Center for Exceptional Children to be moved into new quarters, leaving the mobile units now housing the center for a studio.

Another grant application will be filed with the state Department of Special Education for studio equipment.

"We see this as a boom for the region and West Point," Baker said. "It is an honor that they would ask us."

The superintendent said construction should begin this spring and cost between $150,000 to $200,000. No local funds will be expended except for electrical current to run the tower and studio.

TIDEWATER REVIEW

Sky high

Two unidentified workmen do not seem to mind the altitude as they work toward completing the Centex television transmitter tower located behind West Point Elementary School. The television system, operated by the Center for Excellence in Williamsburg, is scheduled to be operational shortly. [Photo by Alan Chamberlain]

The Times-Herald

Metro News

Newport News, Va., Thursday, Feb. 23, 1978 13

School tunes in 2-way TV

The four teachers at James Blair Junior High School in Williamsburg seemed calm and unconcerned early today as they sat in the school library, watching television and taking notes.

But the four were taking part in what is believed to be the world's first two-way live television system built specifically to train teachers, professionals and parents of handicapped children.

As they watched the broadcast coming from Phi Beta Kappa Hall across town, they saw the color image of Dr. Ruth Mulliken, professor of education at College of William and Mary, as she delivered a lecture on the psychology of learning disabilities.

A total of 150 other teachers in nine other schools in Williamsburg, James City County and York County heard the audio portion of the lecture.

All could ask questions; Dr. Mulliken could hear teachers from the other schools, but she could both see and hear the teachers at James Blair.

Eventually, all participating schools will have video as well as audio, but James Blair was selected as the first site.

Although the current 12-week series of courses began Feb. 16, the system was officially dedicated today by Henry W. Tulloch, president of State Board of Education, with several state and local dignitaries on hand at both the Phi Beta Kappa Hall base station and the James Blair receiving center.

The project was developed by Center for Excellence Inc., a non-profit educational corporation founded by John A. Curtis, who serves as the center's chief operations officer.

It has been in the planning stages for six years and is funded by a $625,000 grant from U.S. Office of Education's Bureau of Education of the Handicapped.

Tulloch termed today a "historic occasion," marking Virginia's first use of modern technology to increase the scope of its educational processes.

Curtis said additional funds are anticipated which will enable the center to extend the system throughout Tidewater and, later, throughout the state.

Other schools taking part in the current program, all located within 20 miles of the Phi Beta Kappa Hall base station, are Berkeley Elementary, Bruton Heights Elementary, Eastern State Hospital, Jamestown Academy, Magruder Elementary, Matthew Whaley Primary, Norge Primary, Rawls Byrd Primary and Walsingham Academy.

Daily Press
SUBURBAN/STATE SCENE
FRIDAY MORNING, Feb. 24, 1978
Page 37

[illegible]er, so that it resembles a normal [illegible]ssroom.

Thomas A. Fallen, an eighth grade science instructor, said an important benefit of the system is convenience — "a painless way" to renew his teaching certificate.

Williamsburg-James City County teachers are required to acquire six credits every five years to remain certified.

Mulliken, Fallen's instructor, said she misses the face-to-face interaction of a regular classroom and hopes her students "will become more spontaneous" in asking questions over the system.

Equipment worth $250,000 has been installed in a television studio in Phi Beta Kappa Hall on the college campus and at 10 area schools: Berkeley, Norge, Bruton Heights, Rawls Byrd, Matthew Whaley and Magruder elementary, James Blair Junior High School, Jamestown Academy, Walsingham Academy and educational facilities at Eastern State Hospital.

The in-service teacher training portion of the Centex project, which could be expanded to counsel parents in individual homes, was funded by the federal Department of Health, Education and Welfare.

The six courses being taught now relate primarily to the implementation of a federal law requiring all children to be educated in the "least restrictive environment." Some educators call this process "mainstreaming," although that is not specified in the law, Mulliken said.

Ruth Mulliken lecturing in Phi Beta Kappa Hall.

(Staff Photos by Willard Owens)

By MIKE NORRIS
Staff Reporter

WILLIAMSBURG — Thirty five Williamsburg-James City County students sitting in 10 different schools Thursday morning heard and questioned the same teacher.

The students were private and public school teachers taking an eight o'clock class in the psychology of learning disabilities taught by Ruth K. Mulliken, professor of education at the College of William and Mary.

Mulliken talked to and with the teachers who were taking the course for re-certification via an elaborate two-way video-audio telecommunications system developed by the Center for Excellence Inc. (Centex), a private educational research firm here.

A number of state education officials and representatives of the college and local schools were on hand Thursday for the dedication of the $425,000 system, including Henry W. Tulloch, president of the State Board of Education, and Henry A. Renz, superintendent of Williamsburg-James City County Schools.

Tulloch praised the system and Centex founder and chief operations officer John A. Curtis.

"It would never have been done without the leadership and commitment to the idea," Tulloch said.

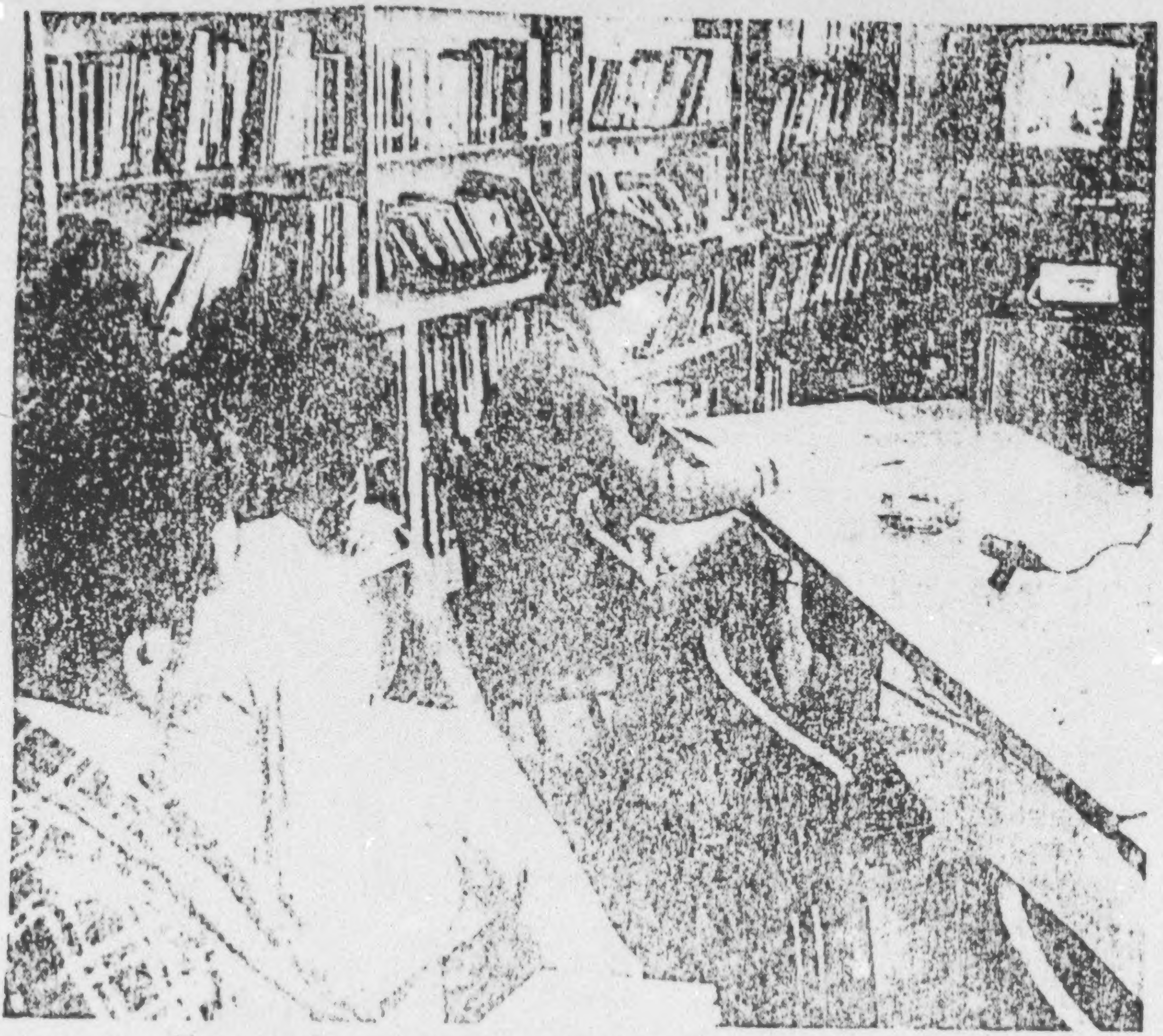
Tulloch emphasized that the Centex project is Virginia's first effort to make extensive use of modern technology to increase the scope of education in the state.

A total of 154 school administrators, teachers, secretaries and other school personnel are taking the free courses, which began airing Feb. 16.

Each of six courses taught by college professors or local school officials is taught twice a week either at 8 a.m. or at 4 p.m.

Participants, teachers and operators agree the unique feature of it is that teachers and students can talk to each

DAILY PRESS, Newport News, Va., Friday, February 24, 1978



Class watches monitor for teacher re-certification course.

Centex Dedicates 2-Way

Telecommunications System

Daily Press

Hampton Roads Morning Newspaper

NEWPORT NEWS-HAMPTON, VA., TUESDAY, JUNE 13, 1978

FOR BLIND, DEAF, ELDERLY

Centex To Offer New Service

WILLIAMSBURG — Multi-media broadcasts of educational programs and services for blind, deaf, elderly and homebound persons in southeastern Virginia are scheduled to begin June 19.

The Center for Excellence Inc. (Centex), a private, non-profit research foundation using federal funds, is now placing free receivers in selected homes and institutions for the first broadcasts. The first broadcasts will consist of reading to the blind and some elderly persons.

Project SCS (Special Communications Services) seeks to "supply unfilled educational needs by organizing resources and making intensive use of modern technology to distribute those resources," John A. Curtis, Centex founder and chief operations officer, said.

The project is the result of more than five years of research and is described by Curtis as "a significant and innovative step toward the long-range goals of Centex."

The first year of the project is funded with a $65,000 grant from the U. S. Department of Health, Education and Welfare. Funding for the second and third years depends on the performance of the program.

The first broadcasts will consist of news and features aimed at "print handicapped" persons. Later, probably within the first week, teletypes for persons with impaired hearing, braille printers for deaf and blind persons and cable television will be added.

Centex officials will join with Virginia Voice for the Print Handicapped under the direction of Carlton P. Brooks to create a network capable of reaching elderly, handicapped or educationally deprived persons all over Virginia, said Alan R. Blatecky, Centex director of telecommunications systems operations. Blatecky will oversee Project SCS.

Centex broadcasts are beamed from studios in Phi Beta Kappa Hall on the campus of the College of William and Mary.

SCS is one of several projects being conducted by Centex, including Project HITT, a television pilot to help "at-risk" children, and Project SETT-UP, which includes in-school teacher training classes.

William and Mary News

VOLUME VI, NUMBER 35
TUESDAY, JUNE 13, 1978

Unique Broadcast Network Being Activated by Centex

What is described as the world's first multi-media broadcast network designed specifically to reach blind, deaf, elderly, and homebound people of all ages is about to become a reality.

The Center for Excellence, Incorporated (CenTeX), working in coordination with the College, is in the process of placing receivers free of charge in selected homes and institutions throughout southeastern Virginia. Program transmission is scheduled to begin June 19.

CenTeX is a private, non-profit research and engineering foundation operating primarily with government ants. Its Board of Directors comes om a variety of business and government agencies. John A. Curtis, founder and chief operations officer for CenTeX, says the corporation seeks to "supply unfilled educational needs by organizing resources and making intensive use of modern technology to distribute these resources." Known as Special Communications Services (S.C.S.), the project is a result of more than five years' research. Curtis calls it "a significant and innovative step toward the long range goals of CenTeX."

Initially, broadcasts will consist of voice transmission with news and features aimed at print-handicapped individuals. Teletypes for the hearing impaired, braille printers for deaf-blind persons, and subsequently cable television will be added to S.C.S. capability in the near future. Plans also call for the creation of an S.C.S. network capable of reaching elderly, handicapped, or educationally deprived people all over the Commonwealth of Virginia.

Curtis said that support from William and Mary has proved "germinal" to the btaining of funding on all levels, and at the Tidewater area of Virginia [illegible]vides "an excellent cross-section" [illegible] the national population, hence his choice to begin the project in this area.

Since the CenTeX system uses F-M multiplex technology to send programs over the subcarrier of existing commercial or public stations, costly transmitters and related equipment are already in place across the nation. Substantial set-up costs are thereby avoided, with relatively modest rental fees required to obtain use of sophisticated hardware. Other listeners will not find their programs altered or interrupted by the service, as a specially designed receiver is necessary for audiences to pick up the new channel.

Primarily the invention of the 69 year old Curtis, whose patents in the mobile communications field have earned him the respect of technologists and the attention of government officials, the CenTeX-S.C.S. system achieved its present form through research by William and Mary faculty members and support from key administrators with the College.

Equally important, the new approach has had the support of both federal and state volunteer and service organizations. The U.S. Department of Health, Education and Welfare approved a first year $65,000 grant in January, 1978, with the stipulation that the level of performance will determine whether or not a second year grant should be approved.

Alan R. Blatecky, director of telecommunications systems operations, will oversee the entire operation of S.C.S., from program creation to actual broadcast. Blatecky has been active in building the S.C.S. concept since July, 1976.

Additionally, the CenTeX Network will become the peninsula component of the Virginia Voice for the Print Handicapped, which is under the direction of Carlton P. Brooks. Combining the two services will greatly enlarge the capacity of both the Virginia Voice and S.C.S.

Curtis, who expressed his enthusiasm for the future of CenTeX-S.C.S., said, "CenTeX is developing in the Tidewater area of Virginia the world's first telecommunications laboratory. It has already established research installations involving the use of the common telephone line, two-way and mobile television. Under the terms of the recently concluded agreement with Warner Cable, we will be developing an experimental installation to distribute educational programming. The multiplexing of the carrier of station WBCI in Williamsburg is the fourth of six planned methodologies in the CenTeX system matrix."

Programming for CenTeX originates either at Phi Beta Kappa Hall or Old Rogers Hall on the William and Mary campus. Dedication ceremonies for the new communication service are scheduled for early July.

THE
VIRGINIA
GAZETTE.

WILLIAMSBURG, JUNE 14, 1978

Network Will Serve Handicapped

What is described as the world's first multi-media broadcast network designed specifically to reach blind, deaf, elderly, and homebound people of all ages is about to become a reality.

The Center for Excellence Inc., working in coordination with the College of William and Mary, is in the process of placing receivers free of charge in selected homes and institutions throughout southeastern Virginia. Program transmission is scheduled to begin next Monday, June 19.

CenTeX is a private, non-profit research and engineering foundation operating primarily with government grants. Its board of directors comes from a variety of business and government agencies. John A. Curtis, founder and chief operations officer for CenTeX, says the corporation seeks to "supply unfilled educational needs by organizing resources and making intensive use of modern technology to distribute those resources."

Known as Special Communications Services, the project is a result of more than five years research.

Initially, broadcasts will consist of voice transmission with news and features aimed at print-handicapped individuals. Teletypes for the hearing impaired, braille printers for deaf-blind persons, and cable television will be added to SCS capability in the near future. Plans also call for the creation of an SCS network capable of reaching elderly, handicapped, or educationally deprived people all over Virginia.

Since the CenTeX system uses FM multiplex technology to send programs over the subcarrier of existing commercial or public stations, costly transmitters and related equipment are already in place across the nation. Substantial set up costs are avoided, with relatively modest rental fees required to obtain use of sophisticated hardware.

AT THE COLLEGE

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Curtis said the Tidewater area of Virginia provides an excellent cross-section of the national population, hence his choice to begin the project in this area.

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Programming for CenTeX originates either at Phi Beta Kappa Hall or Old Rogers Hall on the William and Mary campus. Dedication ceremonies for the new communication service are scheduled for early July.

Primarily the invention of the 69-year-old Curtis, the CenTeX-SCS system achieved its present form through research by William and Mary faculty members and support from key administrators with the college. The new approach has had the support of both federal and state volunteer and service organizations.

TIMES-HERALD:
THURSDAY, June 15, 1978

Broadcast for blind to begin

A Williamsburg-based broadcast network will begin transmitting news and other information June 19 to people who are blind or have difficulty reading printed material.

The Center for Excellence Inc., known as CenTeX, also plans to begin, in the near future, teletype transmissions for deaf people and braille transmissions, over special receivers, for people who are deaf and blind.

The private, non-profit organization is working with College of William and Mary to place receivers in 90 homes and institutions throughout southeastern Virginia.

News and features will be broadcast four hours a day, but organizers expect to increase the transmissions to 10 to 12 hours a day at a later date.

This is the third project of CenTex' special communications services program. The other two are teacher-training broadcasts which are beamed into area schools and children's educational programs for youngsters who are unable to attend school.

The services project is primarily the invention of John Curtis, founder and chief operations officer for CenTeX.

Curtis has been aided by research and support from W&M faculty members and administrators and a $65,000 grant from the U.S. Department of Health, Education and Welfare.

The system uses existing commercial or public stations' equipment to send programs, which are received through specially designed receivers.

Cost of the receivers to be placed in 90 homes is covered by the federal grant.

Richmond Times-Dispatch, Sun., June 18, 1978 C-5

Radio News Service Aims to Aid 'Print Handicapped'

By Sam Barnes

Times-Dispatch State Staff

WILLIAMSBURG — At 7 a.m. tomorrow, a broadcasting service will begin operating out of a tiny booth at the College of William and Mary.

It will have only a few dozen listeners, but it's a sure bet that each of them will be absorbing every word.

The broadcast material will be the news articles of local and state newspapers and magazines. The listeners will be the "print handicapped" — the blind or the physically handicapped who are unable to read.

For 1½ hours, they will hear the news in a way that they have rarely heard it — in depth, and with the odds and ends such as "Dear Abby" that the regular TV and radio networks usually don't carry.

No longer will the listeners have to glean all of their news from a mixture of pictureless TV and abbreviated radio messages.

The broadcasts should be the closest thing to sitting down with the morning newspaper, the organizers of the network hope.

THE PROJECT, serving about a 30-mile radius from Williamsburg, is a pioneer effort at bringing newspapers to the blind with immediacy.

Similar programs are planned for Roanoke and Richmond by the fall and later in Harrisonburg and Norfolk.

Eventually, organizers want to extend the broadcasts to every locality in Virginia.

A non-profit research and engineering foundation, the Center for Excellence Inc., is organizing the Williamsburg project in cooperation with the college.

Statewide, a new non-profit organization, the Virginia Voice for the Print Handicapped Inc., is directing the efforts to coordinate programs.

Eventually, the network of local broadcasting could reach more than 14,500 Virginians who cannot read because of physical handicaps, according to Virginia Voice Director Carlton P. Brooks.

"We're trying to use Williamsburg as a pilot project to see if the programming is right, to see how it's going to work and to get the bugs out," Brooks said.

THE STATE COMMISSION for the Visually Handicapped has identified individuals who are eligible for the program in the Williamsburg area, and the center has supplied them with receivers to attach to their radios to allow them to pick up the special broadcasts.

Only the print handicapped can obtain the special receivers, and that restriction allows center volunteers to read copyright material over the air without first receiving permission. Copyright laws specifically exempt the reading of or the broadcasting of copyright material to the print handicapped, according to center officials.

The organization has contracted with WBCI in Williamsburg to use its equipment.

The only program the center plans for the first two weeks of operation will be the 90-minute news programs beginning each morning at 7.

Other possible broadcast features eventually will include the reading of books, national magazines such as Time and other materials, according to Alan R. Blatecky, the center's director of telecommunications.

"THE PROGRAMMING FORMAT will be decided by the listeners," he said. "If they want books, we'll read books. If they want magazines, we'll read magazines." The center plans to conduct surveys to determine listener interest.

The center in Williamsburg plans to go a step further than the rest of the planned broadcast services and offer programs for the deaf.

It will provide Teletype services by July to transmit local news to the deaf who have Teletypes.

Later, it plans to provide Braille printer services for blind-deaf people who own printers. Both services will operate through signals sent over the radio system.

The center also is planning a TV service for homebound children to follow the progress of their regular classes. Warner Cablevision of Williamsburg will broadcast the programs, and children approved for the project will have special receivers to allow them to pick up the signals on their home sets.

A REASON the center has been able to accomplish so much so quickly is that it has received a $65,000 grant from a special Department of Health, Education and Welfare fund for the first year of the service.

Subsequent grants will depend upon its performance. Officials hope to get another grant during the next two years to expand coverage throughout Tidewater south of the York River, Blatecky said.

The federal grant is allowing the center to buy the special receivers for the listeners for $54 each. It is also paying for rental of radio and Cablevision facilities and professional staff members who handle the equipment.

The Virginia Voice, on the other hand, is depending largely on private donations and needs financial help, Brooks said.

So far, the Virginia Voice is operating with private funds and a grant from the National Foundation for the Blind. "We're operating on a limited budget," Brooks said, by paying a staff of two professionals and seeking volunteer help.

Daily Press

NEWPORT NEWS-HAMPTON, VA., WEDNESDAY, APRIL 5, 1978

Teacher Geller begins TV instruction series.

TV Pilot To Help 'At-Risk' Children

By MIKE NORRIS
Staff Reporter

WILLIAMSBURG — A pilot program of televised instruction for parents of infants who may not develop at a normal rate began Tuesday on the campus of the College of William and Mary.

Called Project HITT (Homebound Interactive Training via Telecommunications), it is financed by a one-year federal grant of $185,000 and is conducted by the Center for Excellence Inc. (Centex), an educational research firm based here.

"Session One of Case One" this week involved one young parent with a 7-month-old child. Centex officials hope to expand televised teaching to at least 10 other locations, including private homes and community centers where more than one parent can receive instruction.

Televised home instruction in Project HITT is designed chiefly for parents of so-called "at-risk" or "high-risk" children up to two years old.

A high-risk infant, for example, may not have learned to walk by the appropriate age. High-risk children are likely to be born to women more than 35 or under 18 years old.

At-risk children are those already evidencing some disability.

In the first class from the television studio in Phi Beta Kappa Hall, Susan R. Geller, a teacher with Child Development Resources, a private agency which deals with high-risk children, showed a young mother how to teach the child his name by playing simple games.

After the 30-minute class, Geller said she felt "very positive" about her first such experience. Using a camera rather than visiting the home did not limit her effectiveness, she said.

As in Geller's class, much of the televised instruction in future classes will deal with basic parent skills, Clifford H. Pence, Centex director of telecommunications support services, said.

Televised instruction need not be supplemented with home visits, Geller said.

In addition to demonstrating the success of televised instruction, Centex officials hope to prove it is an economical method that will "break the shackles of time and geography," John A. Curtis, Centex founder and chief operations officer, said.

Useful for parents without adequate transportation, televised instruction also saves the time of instructors who often spend between 40 and 60 percent of their time traveling to and from homes, Curtis said.

To carry the instruction to several locations, Centex plans to "leapfrog" vans carrying television cameras and transmitters.

To install a transmitter and camera in each location would be "prohibitively expensive," Pence said.

Centex already has a large pool of potential students, but the estimated 10 locations where they would be served have not been determined, Pence said.

Centex President Albert Harris, retired dean of the School of Education at Virginia State College in Petersburg, said he feels this is a way or reaching more people.

Centex officials will soon apply for federal funds to continue the experiment through a second year beginning in October, Pence said.

With much of the equipment and planning already finished, Centex officials hope in the second year to accumulate enough statistical data to prove the success of the experiment.

Daily Press

NEWPORT NEWS-HAMPTON, VA., SATURDAY, NOVEMBER 11, 1978

In-Service Teacher Training May Be Available On Television

By MARCIA MANGUM
Staff Reporter

ROANOKE — Teachers clamoring for in-service training related to special education likely will be able to tune it in on their television sets soon

At Virginia Education Association workshop here Friday, experts in special education said local school systems will have to supply in-service training on a broad scale for teachers handling handicapped students

In-service programs for special education are just being developed, but authorities seem to agree they must address specific questions and must be available to the teachers who need it.

With the idea of providing training at the lowest cost possible, Dr. John A. Curtis founded the Center for Excellence in Williamsburg. Centex, as it is called, provides teacher training through telecommunications. Centex began research in January 1973 for project Sett-up — special education via telecommunications teacher upgrade

Now in its third year, project Sett-up deals with specific training topics based on a needs assessment survey completed by teachers

The telecommunications program addresses unfilled medical, social and educational needs, including an introduction to special education, a sign language course and characteristics of emotionally disturbed children

Six selected courses are available in Tidewater using the two-way telecommunications series. Equipment needed in the schools to get the program includes a receiver and a viewing set.

"We want the teaching to take place at locations and times that the teachers find convenient," Curtis said. The programs are shown before and after school and teachers view them in libraries or reading rooms.

Curtis said the programs fulfill the state's guidelines for using existing systems and resources as much as possible.

In addition, he said, the topics have statewide applicability and the potential for use all across Virginia. Centex is planning to start building its third studio in the lower Peninsula area soon.

"We can disseminate training at a cost not previously thought possible," he said. Curtis estimated Centex will be able to provide complete in-service training at a cost of $35 per teacher annually.

His concern is with making teachers aware how easily the service is available. He said 38 percent of teachers in areas where Centex was available last year participated in the training.

Though his methods involve modern technology, he agrees with many of the traditional principles of in-service training, primarily that it must teach what the teachers want.

In an afternoon workshop on in-service training, Dr. Ruth Mulliken, professor of child psychology at the College of William and Mary, said, "The need for in-service should come from the teachers up, not from the administration down.

"In-service is to help you work with a more diverse group than you have been accustomed to. It should be talking about actual skills, available material and useful techniques to meet Johnny's needs."

She stressed in-service should be a continuing process with teachers constantly asking for sessions about specific questions.

One main function of in-service is helping the teacher recognize how children may deviate from the norm and how specific problems affect learning behavior in the class, Dr. Mulliken noted.

"If in-service is meeting your needs, dealing with your questions, teaching you how to work with parents, then it is effective," she said

The Times-Herald

Metro News

Newport News, Va., Monday, Nov. 13, 1978 11

CENTEX links teachers, colleges

By BOB EVANS
Times-Herald Staff Writer

Editor's Note: This is American Education Week, the time the public usually looks at the nation's schools. With criticism of student performance bringing competency tests and demands for back-to-basics programs, The Times-Herald decided to look during this week at how Peninsula schools are teaching their teachers to be more effective.

Faced with rising public demand that they educate more students and with greater success, Peninsula school systems have made teaching their own teachers a major task.

All have programs for improving employees' skills — called "staff development programs" by educators, but some seem more innovative than others.

Teachers in any system may participate in credit and non credit college course programs coordinated with local universities. The systems make "needs assessment surveys" to determine what type of classes are most needed by their teachers, and these are arranged with the universities.

Both types of classes are also part of statewide teacher certification renewal requirements. Teachers with state certification must take six credit hours of classes every five years to keep their certificates current.

The non-credit courses are usually limited in scope, and give teachers one hour's credit. They generally deal with specific areas of teacher specialties such as dental hygiene, first aid, human relations or new science techniques.

One of the newest of these is the CENTEX system, used in several private schools, Williamsburg-James City County and York County schools. CENTEX, or "Center for Excellence," is a telecommunications system linking schools and their teachers with college instructors via the airwaves.

Operated on an ultra high frequency band, higher than regular television, televised CENTEX classes last from 45 to 90 minutes, before and after school times. This is "one of the great advantages of CENTEX," says A. Edward Sutphin, director of instruction for Williamsburg-James City County schools.

Teachers taking certificate renewal through CENTEX attend classes in front of a television screen, watching and hearing a college professor selected as an expert on the topic. The students can ask questions of the professors, with all those "attending" the course able to hear as well.

Now in its second year, the non-profit CENTEX corporation has plans to expand its current list of six courses and open a second transmitter in the lower Peninsula area.

Officials of the corporation say they are negotiating with school systems now and could begin service to the southern half of the Peninsula in the spring.

For college credit courses, school systems offer partial and full reimbursement plans to faculty and staff members.

In addition to these classes, local schools hold "in service" days, many of which are programmed for a number of teacher and staff seminars or guest speakers. Poquoson, York County and Williamsburg-James City County hold staff development days before each semester of school for this purpose.

Hampton teachers benefit greatly from revising curriculum guidelines in another staff development effort, according to Dr. Joseph H. Lyles, assistant superintendent for instruction. "This keeps a course fresh and up to date," as well as the teachers, he says.

Teachers and supervisors study the curriculum in Hampton and other school systems and then redraft their program to use the best items from their study, Lyles says.

"This proves to be as valuable as anything we do" for staff development, he adds.

York schools are also involved in RECIPE," which stands for Reading Expertise through Continuing In-service Programs for Educators.

Funded by a grant from the federal government, RECIPE is a package of reading materials, programs and teaching techniques presented to reading teachers in short classes by a team of nine teachers and para-professionals throughout a school year. The York-originated program has received national attention and is now being offered as part of the CENTEX curriculum.

The Daily Press 11/30/78

City, College To Receive Two-Way Educational TV

By MARCIA MANGUM
Staff Reporter

A planned contract signing Friday between local school officials and the Center for Excellence in Williamsburg will bring televised in-service training to Newport News teachers next fall.

Newport News public school system, Christopher Newport College and CenTex, a regional telecommunications corporation, have reached an agreement to build a transmitting tower and station here.

CenTex is prepared to spend about $200,000 for the tower and equipment. It will be its second transmitting station, with the first one built in Williamsburg.

The 300-foot tower will be built on public school property near Todd Stadium on Warwick Boulevard, according to Christopher Newport President James Windsor.

The local schools won't have to provide any money for construction. In addition to use of the land, the college and the public schools will be asked to give CenTex some studio space after the system gets going.

John A. Curtis, CenTex founder and executive officer, plans to build a third station in Norfolk. This will allow professional development programs to cover an area from west of Williamsburg to Virginia Beach.

"What we're building here is a network of towers and equipment that will allow us to take education literally out to the people," Windsor said.

"We're interested in this particularly for teacher training," he continued. "We will be able to use one excellent teacher to send out training to schools so it can be watched by groups of teachers."

CenTex has the unique characteristic of allowing two-way communications between the teacher and the people watching the broadcast, Windsor said.

When the system is completed, a Christopher Newport professor could teach a graduate level course from the campus studio and teachers throughout the city could participate in the class from receiving stations inn the public schools.

"We're getting $200,000 worth of equipment plus a certain amount of free air time per day," Windsor said.

Programs can be transmitted over a 15- to 20-mile radius from the tower. Signals also would be transmitted between the proposed towers.

Ultimately Curtis wants to be able to send courses up from the Christopher Newport and other studios to a satellite for transmittal anywhere in the country.

"Also we'd be on the receiving end from any 'satellite up' station," Windsor said. "Christopher Newport students could listen to a lecture from Stanford University in California.

"We're delighted to have the opportunity to affiliate with this corporation. This will put us on the growing end of technology in education."

Windsor said the local schools are particularly interested in using the telecommunications system to get programs to the handicapped.

For example, he said one person who knows sign language could interpret a lesson for many deaf students in different classes.

CenTex has a program already in its third year in Williamsburg for training teachers to work with special education students.

It is based on a teacher needs assessment survey and addresses unfilled medical, social and educational needs, including an introduction to special education, a sign language course and characteristics of emotionally disturbed children.

Curtis is prepared to start building as soon as the contract is signed and the Federal Communications Commission approves the tower.

Windsor and Don R. Roberts, Newport News school superintendent, are prepared to sign a contract with Curtis Friday morning. Windsor said he hopes to be using the telecommunications system by next fall.

THE TIMES-HERALD, Newport News, Va., Friday, April 22, 1977

Schools' two-way TV seen

Several Peninsula schools may get a new form of two-way television instruction next year, officials of Williamsburg's Center for Excellence Inc. (CenTeX) announced today.

At a 2 p.m. press conference at College of William and Mary, CenTeX officials demonstrated a system they call Four Eyes that allows students and teachers to talk and see each other — even if they're in different cities — through television.

If federal money is approved, said John Curtis, founder of the non-profit CenTeX, the system will probably be used next year in Williamsburg, Eastern State Hospital, Poquoson and James City and York county schools.

CenTeX developed the system, unveiled today, with the aid of a $125,000 grant from the U.S. Office of Education's Bureau of Education for the Handicapped.

Curtis said the grant expires in June, and new money (which he believes is forthcoming) will be needed to use the system next school year.

The significant thing about Four Eyes is that it allows teachers to communicate with students miles away without wasting time and money or travel.

Thus, problem students at Eastern State Hospital can talk to teachers from other school systems without the teachers having to actually travel to Williamsburg.

Since television cameras are used on both ends, instructors and students can show and question each other about objects under discussion.

And students can talk back to their instructors, interrupting them to ask questions or request a more complete explanation of a specific subject.

But, Curtis added, the system can also be used to help educational experts certify public school teachers over television, in the comfort of the instructors' office and the teachers' schools, without any traveling.

And they can help students in one school get lessons from an expert in a particular field at another school in another city.

Four Eyes was tested for four weeks in January and February at Rawls Byrd Primary School and another four weeks in February and March at Norge Primary School, both in James City County.

Teachers in one end of each school spoke to teachers in an opposite end, Curtis explained.

No actual over-the-air TV transmissions were involved in this case, he said, because that idea is already proven — CenTeX officials merely wanted to see how teachers would respond to the idea.

They responded very well indeed, he said.

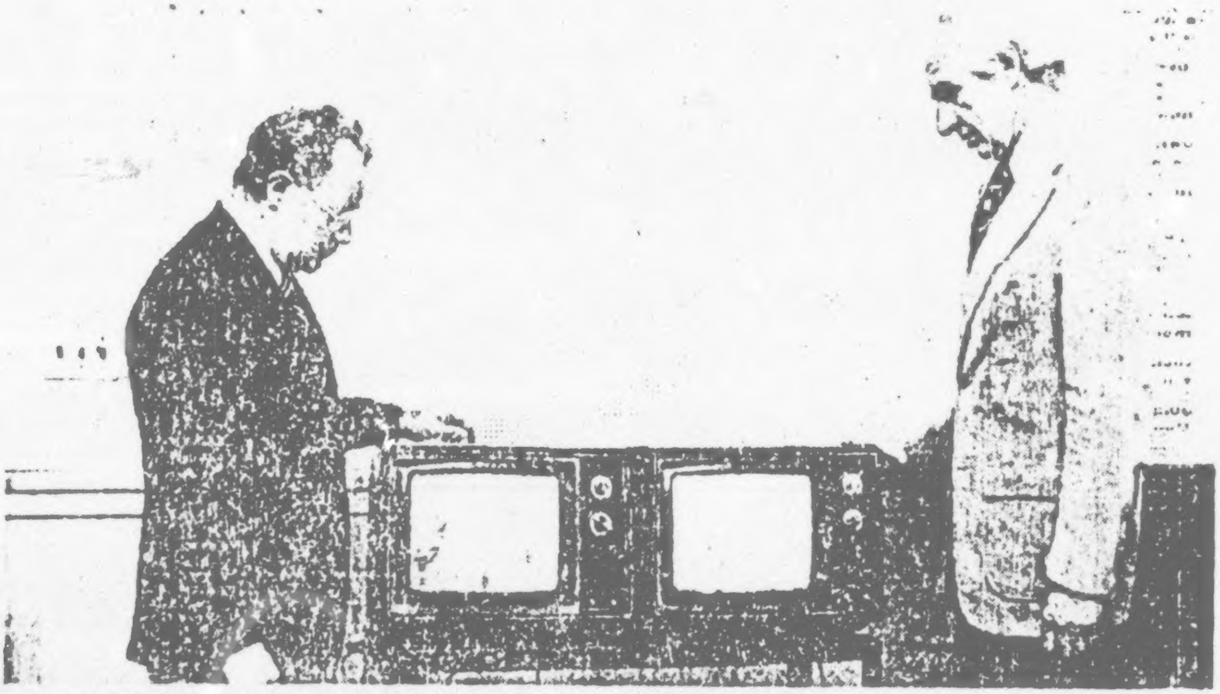
Curtis said the main idea behind the system was to allow special education specialists in a central location to instruct teachers in different schools over a scattered area without traveling.

But, he added, he believes the system will have special impact in psychiatric and psychological interviews and training of student doctors and para-professionals, as well as being useful in training student lawyers and actors.

CenTeX is now seeking 21 faculty members from W&M and Hampton Institute, as well as instructors from state agencies and private schools, to develop the program's curriculum.

Curtis said teacher need surveys are being conducted at Walsingham and Jamestown academies (private schools in the Williamsburg area) as well as York County and Poquoson schools and the elementary school at Eastern State Hospital to see whether they want to use Four-Eyes.

If the answer is yes, Curtis said, the program will be used in those areas next years, once federal money is obtained.



Williamsburg School Supt. Henry Renz (left) and William and Mary Vice President George Healy inspect TV system that lets students watch teacher, and vice versa.

John A. Curtis

'Four Eyes' Can Teach

WILLIAMSBURG — The Center for Excellence Inc. Friday demonstrated its pilot project to use two-way television for teacher training.

The system is called "four eyes" because it involves the simultaneous recording and televising of an instructor at one location and a student group at another location.

The Center, abbreviated CenTeX, has spent the past year obtaining equipment, developing a teacher training curriculum in the area of special education and testing the system under simulated conditions.

The work was done with a grant of $125,000 from the Bureau of Education for the Handicapped, U.S. Office of Education.

At a press conference Friday CenTeX officials said they are pleased with the results of the pilot and hope to offer the telecommunications system to all seven public schools and two private schools in the Williamsburg-James City County area next year.

The system is designed to provide in-service training and recertification courses for teachers at a convenient time and place.

CenTeX is seeking $375,000 in federal funds for each of the next two years to purchase the equipment necessary to put the system on the air.

CenTeX is the brainchild of James City County resident John A. Curtis who is convinced telecommunications has a multitude of uses in education — in the training of teachers, doctors, lawyers and actors.

Working on the project with Curtis have been officials from the College of William and Mary and the local school system.

Williamsburg Mayor Vernon M. Geddy Jr. is chairman of the board and Dr. Richard Brooks, retired dean of the school of education here, is corporate president.

The pilot program involved eight training sessions for small groups of teachers at Rawls Byrd and Norge primary schools.

The teachers gathered around a television set in one room and listened to an instructor in a room down the hall lecture on special education. Both the teachers and the instructor could see and talk to each other.

While the pilot project was conducted with cable run down a school hallway, CenTeX hopes that nex year it can provide programming from its own studi on the William and Mary campus.

Each school would be equipped with a receiving antenna, a downconverter and a television set, according to Alan R. Blatecky. Blatecky and Clifford H. Pence Jr. have been running the program.

All of the connecting schools and the instructor will be able to talk to each other. A mobile transmitting van will be used to give one group two-way video capability.

Cost of an installation at each school would be approximately $4,500, according to Blatecky.

CenTeX also needs to purchase studio equipment and a transmitter.

The signal will be broadcast over a radius of 20 miles on a special low power educational circuit that can be seen only with a special adaptor.

Blatecky is still tabulating teacher reaction to the program, but says most teachers said they liked it better than regular in-service training programs.

The pilot program used six lecturers, four from William and Mary, one from Hampton Institute and an optometrist from Richmond.

Brooks and Dr. Louis Messier, associate professor of education, have been developing a curriculum in special education that meets state requirements for general teacher certification.

CenTeX plans to offer 22 different short courses next year and will modify its offerings based on teacher interest. The courses will be offered at times convenient to teachers, such as before and after school.

Expansion of the program is dependent on more federal money. Blatecky said continuation of funding at the present level of $125,000 would limit CenTeX to essentially what it did this year.

16 Teachers Honored For '4 Eyes' Work

16 Williamsburg-James City County public school teachers have been recognized for their contributions in the development of "Four Eyes," an instructional television training system developed by CenTex.

Certificates were presented after a demonstration of the new system last Friday at the College of William and Mary. Four Eyes records and televises an instructor at one location and a student body elsewhere. Both the picture and the audio from each location is transmitted to the other to maintain face-to-face instruction.

The local teachers were recognized for their volunteer participation in pilot-tests of the program. The tests were organized at Rawls Byrd and Norge Primary schools under the direction of schools superintendent Henry A. Renz; Edward Sutphin, director of instruction; and Barbara McLane, director of pupil personnel services.

Certificates were presented to: Elizabeth Beckhouse, Florence Bragg, Dorothy Cobb, Bette Farrar, Carilyn Lewis, Ruth Pope and Joseph Keggan from Rawls Byrd; and Judy Evans, Jan Gandy, Karin Kerner, Bernice Lewis, Vickie Robertson, Nancy Smith, Rosanne Wilson, Evelyn Woods and Lois Yates from Norge.

Four Eyes is believed to be the first program of its kind in the world.

The Times-Herald

Metro News

Newport News, Va., Friday, May 21, 1976 9

School television system displayed

The Center of Excellence, Inc. has announced a Monday press conference in Williamsburg at which its officials will explain how they developed a two-way television system that allows teachers to broadcast courses and lets students talk back to them.

Such a system, which the organization claims is "the world's first," obviously would be of help to the handicapped and others who cannot leave home.

The non-profit institution, known as Centex, is associated with the College of William and Mary.

Richmond Times-Dispatch, Tues., May 25, 1976 B-5

Old Capital Group Gets U.S. Funds

Times-Dispatch State Staff

WILLIAMSBURG — The Office of Education has awarded a three-year, $375,000 grant to a Williamsburg foundation to develop a two-way telecommunications system to teach area schoolteachers how to deal with handicapped children, it was announced Monday.

John Curtis, founder of the Center of Excellence, Inc., (Centex) here, said the system will, to his knowledge, be the first ever applied to the needs of special education.

Aid to Teachers

The system, which is yet to be developed, will be used to help regular classroom teachers first in Williamsburg and James City County and then in the Peninsula with the problems of handicapped children, he said.

The teachers will be taught up-to-date information needed in after-school classes.

The two-way electronic system, using 23 channels set aside for educational purposes by the Federal Communications Commission, will eliminate the necessity for commuting to distant classes, he said.

Needed Equipment

Curtis said the equipment needed for the system is "low powered," demanding less than 10 watts, and is easy to operate.

He said he did not know how many cameras and how much equipment would have to be purchased or where the transmitters will be located, but that equipment costs are expected to absorb about half of the $375,000 grant.

In a 1974 article in the journal, Engineering Education, Curtis recommended that a national telecommunications authority be established and that the 28 channels become the basis for a "national telecommunications network for education."

Centex will cooperate with the Williamsburg-James City County school system and the school of education at William and Mary in the special education project, Curtis said.

Dr. Richard B. Brooks, Centex president, and dean emeritus of the school of education, will head the program.

Faculty members from William and Mary, Virginia State College, Virginia Polytechnic Institute and State University and the University of Virginia will assist in various aspects of the program.

THE TIMES-HERALD, Newport News, Va., Tuesday, May 25, 1976

Two-way television

System to aid teachers

Regular classroom teachers from Williamsburg-James City County public schools will be the first to profit from a new two-way telecommunications system for training in special education.

A $375,000 grant has been awarded by the Federal Office of Education's Bureau for the Education of the Handicapped to the Center of Excellence Inc., John A. Curtis, the center's founder, announced Monday afternoon.

The three-year grant — $125,000 per year — will be used to develop curricula and delivery systems for in-service teacher training.

With the two-way system, students and teachers in the classroom and the teacher in the TV studio will be able to see and hear each other.

Curtis said city-county school officials will meet June 2 to determine the schools and teachers to be involved in the project.

The system will be installed at the end of the first year and be in operation at the beginning of the second year, Curtis said. By the third year, "any school system in the area" (including Southside, Middle Peninsula and Tidewater) will be able to use the system, he said.

Curtis, who announced the grant along with Dr. Richard Brooks, retired dean of the College of William and Mary's school of education, said it is "believed to be the world's first project to make intensive use of telecommunications to provide and distribute special education services."

Brooks is president of the Center of Excellence — known as CenTeX — and Williamsburg Mayor Vernon M. Geddy Jr. is chairman of the board of directors of the non-profit corporation.

THE RICHMOND NEWS LEADER

Tuesday, May 25, 1976

Foundation Gets Training Grant In Williamsburg

WILLIAMSBURG — A foundation here has been awarded a three-year, $375,000 grant to develop a two-way telecommunications system to teach area school teachers how to deal with handicapped children.

The grant was awarded to the Center of Excellence, Inc., which will work with the Williamsburg-James City County school system and the College of William and Mary's school of education.

The system will use channels set aside for educational purposes by the Federal Communications Commission and is designed to eliminate the necessity for teachers to commute to distant classes for training.

DAILY PRESS, Newport News, Va., Tuesday, May 25, 1976

TELECOMMUNICATIONS PROJECT

Special Education Grant Made

GABRIELE
Staff Reporter

WILLIAMSBURG — A $375,000 federal grant has been awarded to a Williamsburg Corporation to develop a two-way telecommunications system for special education training.

The three year grant will be used by the Center of Excellence Inc. (CenTeX) to develop curricula and delivery systems for in-service teacher training.

The funding is the result of three years of effort by John A. Curtis of Williamsburg, a telecommunications expert who is trying to develop a national educational telecommunications network.

Curtis said Monday he believes this is the "world's first project to make intensive use of telecommunications to provide and distribute special education services."

CenTeX will be working cooperatively with the College of William and Mary, whose top administrators are on the CenTeX Board, to develop the project.

The in-service training programs will be distributed first to Williamsburg-James City County schools and later to all school systems on the Peninsula, according to Curtis.

Curtis and Project Director Dr Richard B Brooks, retired dean of the School of Education, announced the grant Monday at a press conference in the Great Hall of the Wren Building.

The in-service training programs will be designed to help regular classroom teachers handle special education students in their classes, according to Curtis.

Credit toward teacher certification will be given by the state, according to Brooks.

Curtis explained the first year will be used to engineer the system and develop curricula.

Half of the grant money will be used for equipment, according to Curtis. This includes new studio and protable video equipment for William and Mary's television center; the station, and special adaptors and two-way equipment in the schools.

The system will be installed in Williamsburg-James City County schools during the second year and offered to all Peninsula and neighboring school systems during the third year.

Additional money is being sought to purchase a mobile unit to bring similiar programming into the home, Curtis said.

Brooks and Dr. Louis P Messier, associate professor of education, will be developing the curriculum along with faculty members from William and Mary, Virginia State College, VPI and the University of Virginia.

The grant was awarded by the Bureau for the Education of the Handicapped from the U S. Office of Education.

Curtis said a manual will be developed at the conclusion of the project and the entire project will be evaluated at every step.

Curtis' proposal is an attempt to bring modern technology into a labor intensive field. It utilizes a band of the ultra-high frequency range that has been reserved by the Federal Communications Commission for use by non-profit educational institutions.

Since its formation in January 1973, CenTeX has spent approximately $150,000, half in cash and half in services, for research and attempts to get funding, according to the press release.

It claims its research has shown that only 60 per cent of the 10.4 per cent of Peninsula residents under 21 who need special education are getting it.

It also claims more than 3[illegible] per cent of the state's special education teachers are not properly certified.

The project would be aimed initially at regular classroom teachers.

Williamsburg Mayor Vernon M. Geddy Jr. is chairman of the CenTeX Board.

The Virginia Gazette, Williamsburg, Va., Friday, May 28, 1976

Two-Way TV Nets Local Firm Grant Of $375,000

A federal grant totaling $375,000 over three years has been made by the U.S. Office of Education to Center of Excellence Inc., a nonprofit corporation involved in educational research here.

The grant, in yearly allotments of $125,000, will be used to develop two-way telecommunications systems that will carry special educational services to remotely located classrooms, according to John A. Curtis, executive vice president of the corporation. The Centex project is believed to be the first of its kind using two-way television as a medium for disseminating training programs for teachers in special education clases.

Curtis said in an interview Monday that nearly one-third of the public school teachers providing special education services in Virginia are not certified for their "sensitive" responsibilities. By special education requirements, Centex uses eight categories of mental and learning disabilities, ranging from deafness to emotional instability.

Centex, organized in 1973, is presently housed at Phi Beta Kappa Hall at the College of William and Mary, under a "working relationship" between the organization and the college, Curtis explained. The 11-member board of directors of Centex includes four faculty and administrator members from the college.

Live broadcasts, videotaped materials, and "two-way" television transmissions will be included in a wide-ranging experiment in upgrading special education teachers' professional skills, Curtis said.

Dr. Richard B. Brooks, president and a director of the nonprofit Centex, will be project director under the grant. The project title is SETT-UP, after Special Education via Telecommunications: Teacher Upgrade. Brooks is dean emeritus of William and Mary's School of Education.

Curtis thanked the College of William and Mary administration, School of Education faculty, and Del. George W. Grayson of Williamsburg for assistance in securing the federal grant.

DAILY PRESS, Newport News, Va., Sunday, June 6, 1976

Vision Of National TV Education Coming Closer

By VIRGINIA GABRIELE
Staff Reporter

WILLIAMSBURG — John A Curtis has a vision of harnessing telecommunications for education

For the past eight years the retired computer and electronics specialist has been promoting a national network that would link people via special television circuits to this nation's vast but geographically concentrated resources of knowledge and education

"The day of having to go to a given geographical location at a designated time to get educated is past in my opinion," said Curtis recently

Sitting in his confortable study surrounded by nearly a room full of data on telecommunications, Curtis expounded on his theory that democracy will be destroyed in 25 years if education "doesn't wake up"

Curtis has written technical and general interest papers, given speeches attended conferences, worked on national advisory committees, solicited support from the educational community and collected nearly a room full of data

Three years ago he lined up academic, civic and business support in the Williamsburg area and founded a non-profit company, the Center of Excellence Inc., abbreviated CenTeX

Curtis, who had conducted think tanks around the country and done extensive consulting work in electronics, organized lengthy methodical studies to give direction to his telecommunication ideas

The studies revaled the Peninsula is a "near-perfect microcosm" of American life and special education is its major education problem

Just finding the proper federal agency to submit the grant application to took nearly a year, according to Curtis

Now Curtis, who can quote complicated statistics and theories from memory and put his hands on any paper in his massive files within a few minutes, has a chance to put his theories into action

The Bureau for the Education of the Handicapped in the U S Office of Education has awarded CenTeX a three-year grant of $375,000

The funds will be used to purchase and install telecommunications equipment and to develop and institute in-service training programs to teach public school teachers how to cope with special education children.

The first year of the grant will be spent working out the specifics of the program and engineering the two-way system

The idea will be tested in several Williamsburg-James City County public schools during the second year and distributed throughout the Peninsula and adjoining areas in the third year, according to plans

Expanding the project to remote schools and the homes of special education students would require a mobile van which will be part of a future funding application.

The need to break the barriers of geography and time that limit utilization of educational resources was imprinted on Curtis' mind in his childhood

The young teacher, in his one-room schoolhouse in the Catskill Mountains would regularly take a 110 mile train ride to get books for her students from the New York City public library

Telecommunications has already broken these barriers in many areas of the country

Closed-circuit microwave hook-ups have linked Boston's Massachusetts General Hospital for the past seven years with a medical station at Logan Airport across the harbor and with a veteran's hospital in Bedford 25 miles away

Young lawyers in the Washington, D C law office of Curtis' father-in-law gather around a television screen every week to learn the laws of Virginia, Maryland and the district.

The special low power educational circuits that will be used by CenTeX are already in use across the country, although not in Virginia, according to Curits Unlike regular television circuits, the need for a special adaptor makes these circuits essentially private

JOHN A. CURTIS

The Collge of William and Mary is working closely with CenTeX. Professors in the school of education will be developing the curriculum for the project and the college's television technicians will be doing the actual transmission

The grant comes at a time when the college's television program is at a crossroads and will give the program new studio and portable video equipment and new direction.

Curtis explained special education was chosen for the project because it is "the one area that will show the best results in the shortest period."

He envisons the system ultimately bringing education into the home from birth to death

Once CenTeX's project is running smoothly, Curtis plans to bow out and turn his interests in invention and innovation toward "another equally intriguing project"

DOCUMENTATION NINE

SCS Volunteer Newsletter

John Curtis Copy

VOLUNTEER NEWSLETTER

SPECIAL COMMUNICATION SERVICES

VOLUME TWO: NUMBER ONE
SEPTEMBER 1982

THREE CHEERS FOR THE VOLUNTEERS!!!

THE SUMMER OF 1982 WAS A BIG ONE FOR SCS, AND THE CREDIT GOES TO THE VOLUNTEERS. OVER 240 VOLUNTEER HOURS HAVE BEEN LOGGED IN FROM JULY TO SEPTEMBER. THE MONTHLY AVERAGE HAS BEEN AROUND 80 HOURS, WITH MOST VOLUNTEERS AVERAGING 2 HOURS PER WEEK. WE HAVE ALL BEEN FLEXIBLE, SCHEDULING AND RE-SCHEDULING AROUND VACATIONS AND OTHER COMMITMENTS AND ARE LOOKING FORWARD TO THE RETURN OF SOME LONGTIME VOLUNTEERS.

OCTOBER BRINGS NEW PROGRAMS TO SCS LISTENERS . . .

THE SCS LISTENER SURVEY BROUGHT MANY PROGRAM SUGGESTIONS. SOME HAVE ALREADY BEEN IMPLEMENTED. OTHERS ARE JUST ABOUT TO BEGIN. FIRST, HERE ARE SOME OF THE IMPROVEMENTS RECENTLY IMPLEMENTED AT OUR LISTENERS' SUGGESTIONS: MORNING NEWS PROGRAMMING BEGINS AN HOUR AND A HALF EARLIER, AT 7 AM INSTEAD OF 8:30 AM(EFFECTIVE IN JULY); MORE LOCAL NEWS IS OFFERED FROM THE GLOUCESTER-MATHEWS GAZETTE JOURNAL AND THE NORFOLK JOURNAL AND GUIDE WEEKLIES; NEWS REPEATS ARE SCHEDULED AT REASONABLE INTERVALS; A LARGE-PRINT PROGRAM SCHEDULE IS BEING MAILED TO LISTENERS; PROGRAM SCHEDULES ARE ANNOUNCED OVER THE AIR; AUDIO FROM C-SPAN (LIVE COVERAGE OF CONGRESSIONAL PROCEEDINGS) IS OFFERED DURING THE DAY WHEN SCS IS NOT PROGRAMMING LOCAL NEWS; AND EVERY EFFORT HAS BEEN MADE TO ELIMINATE SILENT GAPS BETWEEN PROGRAMS!

THE NEW OCTOBER PROGRAMS WILL EXPAND OUR LOCAL PROGRAMMING HOURS. WE WILL BEGIN A "NORFOLK FOCUS" DAILY WITH A ONE-HOUR SHOW TO BE EXPANDED TO TWO AS WE HAVE MORE USERS IN THAT AREA. A CHILDREN'S HOUR WILL BEGIN AT 4 PM-5 PM FOR AFTER-SCHOOL LISTENING. WE NEED A GROUP OF VOLUNTEERS TO WORK TOGETHER ON BOTH OF THESE NEW PROGRAMS! IF YOU HAVE INTEREST OR EXPERTISE TO OFFER REGARDING THESE SHOWS, PLEASE LET NANCY KNOW. THANKS. WE'LL KEEP YOU POSTED. ALSO, WE HAVE HAD A LISTENER REQUEST FOR REGULAR READINGS FROM THE "WILLIAMSBURG ADVANTAGE." IF YOU WOULD LIKE TO READ THE "ADVANTAGE" LET YOUR INTEREST BE KNOWN.

A VOLUNTEER TAKES INITIATIVE...

Joan Poulin has been active in SCS, reading novels, news and more recently initiating a new program. Joan and other volunteers have expressed interest in serving the spiritual needs of our listeners and the survey mirrored that interest as listeners expressed a need for "religious" programs. Joan has produced four half-hour programs of an ecumenical nature dealing with spiritual topics. So far, the program, called "The Bread of Life" has met with listener enthusiasm. Callers have been complimentary and thankful that the program is on the air. "The Bread of Life" is aired each Monday morning at 8:30-9 and repeated Wednesday evening from 6-6:30 and again on Friday mornings. The topics addressed to date are: "Creation", "Patience" and "I Am With You Always". We are looking forward to more of Joan's good works! By the way, she is taping her programs at home and dropping them off for us. So far, so good.

* * *

If you have any program ideas or suggestions, the door is open! Please share with us. There is much more time available for new programming.

* * *

We especially need committed groups of volunteers like the good folks from St. Martin's Episcopal Church. Clara and Rushmore Child are coming in for 2 hours each every Wednesday afternoon to "cut and paste" the Virginia Gazette and are joined by 2 more members of their church (usually Howard Grant and Janet Blair) to record two half-hour segments aired twice weekly. The big advantage of a group like St. Martin's is that they are self-contained: they prepare their own program, read and record it and schedule their substitute-readers internally. This ensures continuity and a high quality program. If you are a member of a church, club or social group with talented, public spirited members, encourage others to join with you to have a self-contained reading group!

Thanks to St. Martin's substitute readers Mollie Robbins, Myrtle Engs and stand-in Sherwin Helms for helping out this summer.

WELCOME TO NEW VOLUNTEERS...

DOROTHY CHICKOS CAME TO WILLIAMSBURG, AS MANY DO, TO RETIRE. BUT HER DESIRE TO HELP OTHERS BROUGHT HER TO SCS AS "OUR GIRL WEDNESDAY!"

DOROTHY IS AN RSVP (RETIRED SENIOR VOLUNTEER PROGRAM) RECRUIT. THE FOUR HOURS SHE DONATES EACH WEDNESDAY ARE ALREADY MAKING THE SCS OFFICE RUN MORE SMOOTHLY. SHE HAS PERFORMED A VARIETY OF TASKS (ALL OF THEM WELL) AND WE JUST WISH THERE WERE MORE OF HER.

BILL HICKS HAS A HISTORY OF VOLUNTEER WORK. HE PREVIOUSLY DUPLICATED CASSETTE TAPES OF SERMONS FOR HIS CHURCH IN NEWPORT NEWS AND HE HAS INDICATED A WILLINGNESS TO HELP US AT SCS TWO AFTERNOONS A WEEK.

GEORGIA DONALDSON IS A SALES REPRESENTATIVE FOR WBCI. SHE GRACIOUSLY COMES IN BEFORE WORK EVERY FRIDAY MORNING TO READ FOR SCS. GEORGIA WAS A DRAMA MAJOR AND HER DELIVERY IS A REAL TREAT TO HEAR. GEORGIA IS ALSO VERY ACTIVE IN "BIG BROTHER-BIG SISTER."

COURTLAND BOSTIC ARRIVED AT SCS AS A READER ON WEDNESDAYS SINCE HE HAS BUSINESS HERE THAT DAY. COURTLAND IS FROM NEWPORT NEWS, IS ALSO ACTIVE IN THE AMERICAN CANCER SOCIETY AND IT SEEMS HE WORKED AT THE KINGS ARM TAVERN WAITING TABLES WITH VOLUNTEER CONNIE GRANGER'S HUSBAND GIL WHEN THE THREE WERE WILLIAM AND MARY STUDENTS! IT'S A SMALL SCS WORLD.

Volunteers in the News:

OTHER VOLUNTEERS IN THE NEWS...

JOHN FERGUSON HAS WRITTEN SEVERAL ARTICLES FOR OUR RTTY DEAF NEWS SERVICE. RIGHT NOW, HE IS CONCLUDING AN EXCITING RESEARCH PROJECT ABOUT A DEAF ARTIST. JOHN HAS LOCATED 4 PORTRAITS IN WILLIAMSBURG BY THAT ARTIST AND WE WILL SHARE HIS REPORT WITH YOU IN OUR NEXT ISSUE.

TOM JONES AND LLOYD YOUNG HAVE BEEN OUR EARLY-BIRDS LATELY, MANAGING TO READ FOR SCS BETWEEN TENNIS SETS. THEIR EFFORTS HAVE MADE OUR EARLY MORNING PROGRAMMING A SUCCESS.

SUZANNE DYAL RECENTLY MOVED "NORTH" FROM FLORIDA. SHE WAS INVOLVED WITH A LARGE RADIO READING SERVICE DOWN SOUTH AND BRINGS EXPERIENCE, A TRAINED VOICE AND FRESH IDEAS TO SCS. SHE'S ANOTHER EARLY BIRD AND CAN BE HEARD AT 7:30 AM EVERY THURSDAY.

William Lockhart has recently expanded his reading commitment from one to three days a week. His help on Thursday and Friday afternoons is a valuable gift of time.

Connie Granger continues to be a dependable and excellent reader! We look forward to resuming daily editorials because few can deliver that literal (literary?) punch like Connie can....

Helen Smith came to us as a typist and is now a valued reader! Which goes to show that SCS volunteers are both talented and versatile.

Long-time volunteer Clarence Page makes an early appearance at SCS and last week he brought in a coffee pot! Thanks to Clarence for his thoughtful gift.

Many of our volunteers have other civic activities! We are especially thankful that they find time for SCS. Remember, your hour here is multiplied to reach as many as 100 people!

A special thanks to Louise Stoke, Florence Steinhauer, Polly Spaulding and Edna Bedell for keeping SCS on their busy list.

We are looking forward to the return of Susan Roebuck and Betty Cox. Both have had family commitments keep them busy this month.

A special note of thanks to Marilyn Holloway and wishes for a speedy recovery. Marilyn is a member of St. Martin's Church and she heard about our project there. Just as she was a regular Friday reader, she ended up in a leg cast! 'Hope to XXX hear you again soon, Marilyn!

* * *

We are happy that the Special Communication Services volunteers are so dedicated! Without the volunteers, SCS would not be able to offer the vital communication link of community news to the visually impaired, homebound and deaf users of our service. Thanks for helping battle one of the greatest obstacles of a handicap--Isolation. With your help, people are able to stay in touch with people. Keep up the good work.

DOCUMENTATION TEN

Chamber of Commerce Listing of SCS Fellow Public Service Entities

Williamsburg Area Chamber of Commerce
Post Office Drawer HQ
229-6511

DIRECTORY OF LOCAL ORGANIZATIONS AND SERVICES
Unless otherwise noted, all addresses are Williamsburg, VA 23185

ALCHOLICS ANONYMOUS, AL-ANON AND ALATEEN: 874-5706

AMERICAN ASSOCIATION OF RETIRED PERSONS (AARP)
President: Mrs. Ann Shaner, 13 Del Lago Dr. 887-1898

AMERICAN ASSOCIATION OF UNIVERSITY WOMEN (AAUW)
President: Mrs. Ross Payne, 104 Shoreman La. 229-8838

AMERICAN HEART ASSOCIATION (AHA)
Regional Office: Post Office Box 5009, Newport News, VA 23605, 244-0119

AMERICAN LEGION POST #39
President: Mrs. K. A. Yelland, 816 Cascade Dr. Newport News, VA 23602,877-6860
Auxiliary President: Mrs. Gilbert Kinnamon, 230 N. Boundary St.,253-2335

ARMY RESERVE CENTER
First Sergeant: John Watkins, 200 John Wythe Place, 220-1525

ARCHAEOLOGICAL SOCIETY OF VIRGINIA
Contact Person: Mark Wittkofski, 124 Duer Dr., 220-2857.,253-4836

ASSIST PROGRAM(% Williamsburg Community Hosiptal)
Contact: Col. George Wendel, 229-9606

ASSOCIATION FOR THE PRESERVATION OF VIRGINIA ANTIQUITIES (APVA)
Director: Richard Rennolds, 2705 Park Avenue, Richmond,VA 23220.,359-0239

AZALEA GARDEN CLUB OF QUEENS LAKE
President: Mrs. Ruby Flaugher, 102 Greenwood Dr. 229-6566

BACON STREET(Counseling Service)
105 Bacon Avenue,253-0111

BAR ASSOCIATION
Contact: Sheldon Franck, P.O. Box 276, 229-5510

BERKELEY GARDEN CLUB
President: Mrs. Felix Crommie, 37 Miles Course, 220-3163

BETA SIGMA PHI-XI ALPHA LAMBDA CHAPTER
President: Mrs. Shirley Lassiter, 111 Stevens Rd. Newport News, VA 23602,877-0613

BIG BROTHERS-BIG SISTERS OF WILLIAMSBURG
Williamsburg, Presbyterian Church, P.O. Box 1331, 229-6096,229-4235

BIRCHWOOD ESTATES GARDEN CLUB
President: Mrs. Theresa Runyans, 105 Rogers Ct., 229-5633

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BOY SCOUTS OF AMERICA
Regional Office: 11725 Jefferson Avenue, Newport News, VA., 595-3356; 877-5085

BUSINESS & PROFESSIONAL WOMAN'S CLUB
President: Mrs. Frances Whitaker, 106 Oak Rd., 229-3741

CANCER SOCIETY
Williamsburg Unit: 9624 Warwick Blvd., Newport News, VA; 874-6087

CAPITOL LANDING GARDEN CLUB
President: Mrs. Dianne Fannin, 114 Mimosa Dr., 229-8881

CATHOLIC DAUGHTERS OF AMERICA
Court of Our Lady of Perpetual Help, Pres: Helen Carter
P.O. Box 776, Williamsburg, VA 23185

CHAMBER OF COMMERCE, WILLIAMSBURG AREA
Executive Vice - President: Robert R. Perry, P.O. Box HQ, 229-6511
President: G. T. Brooks, P.O. Box GT, 229-5757
Travel Director: Alfred Nichols, P.O. Box GB, 253-0192

CHILD DEVELOPMENT RESOURCES, WILLIAMSBURG AREA - 565-0303
Executive Director: Barbara Acres Kniest, P.O. Box 299, Lightfoot, VA 23090

CHILD ABUSE AND NEGLECT: 1-800-522-7096

COLLEGE OF WILLIAM & MARY
President: Dr. Thomas A. Graves, Jr., President Home, 253-4000

COLLEGE WOMAN'S CLUB
President: Mrs. Susan Geary, 113 Arches Hope Dr., 229-8835

COLONIAL COMMUNITY MENTAL HEALTH CENTER
1657 Merrimac Trial, 220-3200

COLONIAL SQUARES
President: Mrs. Carey Adams, 105 Quaker Meeting House Rd., 565-1568

COLONIAL WATER SKI CLUB
President: Mike Latimer, Toano, VA., 564-8352

COLONIAL WILLIAMSBURG FOUNDATION
President: Charles R. Longsworth, Goodwin Building, 229-1000

COLONIAL WORKSHOP INC.(Developmentally Disabled)
1490 Goverment Rd., 229-8702, 229-8703; 229-8728

COMMUNITY ACTION AGENCY
Executive Director: Larry Trumbo, P.O. Box HK, 229-9332, 9389, 4976

COMMUNITY HOSPITAL, WILLIAMSBURG
President: Kenneth H. Axtell, 1238 Mt. Vernon Avenue, 253-6000

COMMUNITY HOSPITAL AUXILIARY, WILLIAMSBURG
President: Mrs. John A. Dodgen, 104 Sherwood Dr., 229-0035

CONSUMER AFFAIRS: 1-800-552-9963

CONTINUING CARE PROGRAM
Director: Harris Daniel, 1657 Merrimac Trail, 220-0800

DAUGHTERS OF THE AMERICAN REVOLUTION
President: Mrs. Frank Pierce. Jr., 4 Braywood Kingsmill, 220-2025

DOGWOOD GARDEN CLUB OF QUEENS LAKE
President: Mrs. H. F. Sutton, 237 "F" Queens Dr., 229-3649

EASTERN STATE HOSPITAL
Director: David Pribble, Drawer A, 253-5000

ELKS
Contact: Gerald DeFord, Gloucester, VA 887-7483

EXCHANGE CLUB
President: Bill Blanton, 103 Williamsburg Avenue, 229-7295

EXCHANGE CLUB OF GREATER WILLIAMSBURG
President: Robert Sowell, 9 Winster Fax, 229-4339

EXCHANGE CLUB OF JAMES YORK
President: Robert T. Smith, 114 Winston Dr., 229-5173

FIRE DEPARTMENT AUXILIARY, WILLIAMSBURG
President: Mamie Ruth Hitchens, 356½ North Henry St., 229-4763

FIRE DEPARTMENT VOLUNTEERS, WILLIAMSBURG
President: Kathy Ragsdale, 220 NeckOLand Rd., 229-2778

FIRST COLONY CIVIC ASSOCIATION
President: James Waller, 122 Jordan Journey, 229-6991

FIRST COLONY GARDEN CLUB
President: Mrs. Winston Hobbs, 194 The Main, 229-3398

FOCUS TEAM(Mental Retardation Information & Referral)
Director: Anne Moyer, 1657 Merrimac Trail, 220-1338., (part of Colonial Services Board)

FRIENDS OF THE WILLIAMSBURG REGIONAL LIBRARY
President: Wood Williamson, 229-1000 Ex. 2782

GIRL SCOUTS OF AMERICA, HERITAGE COUNCIL
Regional Office: 5 Greenwood Rd., Newport News, VA 23601 874-0981

GREATER WILLIAMSBURG ASSOCIATION FOR RETARDED CITIZENS
President: Bruce Locke, 110 Stanley Dr., 229-7498

GREEN SPRING GARDEN CLUB
President: Mrs. Edward Gray, 128 Kingspoint Dr., 229-3409

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Page 4 - Local Organizations and Services

HANDICAPS UNLIMITED
President: Lena Fekete, Monumental Avenue, 229-6904

HEALTH DEPARTMENT
Director: Dr. Gordon D. Bell, P.O. Box BK, 253-4813

HELLENIC PARENTS ASSOCIATION
President: Pat Manos, 127 W. Kingswood, 229-5049

HERITAGE REPUBLICAN WOMEN'S CLUB
President: Mrs. Edwin Riley, 611 Tam-O-Shanter Blvd., 229-6372

*EXCHANGETTES CLUB
President: Mrs. Esther Batchelder, 231 John Tyler Hwy., 229-2520

JAMESTOWN FOUNDATION(Jamestown Festival Park)
Acting Director: Mr. Ross Weeks, P.O Box JF, 229-7442

JAYCEES
President: David Waltrip, P.O. Box 175(Club Address), 229-9396

JUNIOR WOMAN'S CLUB OF JAMES CITY COUNTY
Contact Person: Mrs. Cheri K. Richards, 165 Sheppard Dr., 253-0160

JUNIOR WOMEN'S CLUB OF WILLIAMSBURG
President: Mrs. Lorraine Stevens, 211 John Wythe Place, 220-3680

KINGS DAUGHTERS AND SONS
President: Mrs C. C. Thorpe, 138 W. Queens Dr., 229-2956

KINGSPOINT GARDEN CLUB
President: Mrs. Joe Miller, Crown Point Rd., 253-2312

KINGSWOOD GARDEN CLUB
President: Mrs. Dorothy McCann, 214 Kingswood Dr., 229-6492

KIWANIS CLUB OF WILLIAMSBURG-President: George Grattan,(126 Crown Point Rd.,
KIWANIS CLUB, COLONIAL CAPITOL-President: Don Messmer, 229-5065) a m.
28 Ensigne Spence., 229-0764

KNIGHTS OF COLUMBUS
President: Frank Moore, 141 Cooley Rd., 229-8681

LADY LIONS AUXILIARY OF WILLIAMSBURG
President: Mrs. Linda Perkins, 103 Lorac Ct., 229-8782

LEAGUE OF WOMEN VOTERS
President: Mrs. Peggy Koesler, 496 Burnham Rd., 229-8060

LEGAL AID CENTER: 220-3425

LIONS CLUB OF JAMESTOWN/ LADY LIONS AUXILIARY OF JAMESTOWN
Contact: Mrs. Velma Dishman, Lot 74 Chickahominy Haven, 564-8150

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LIONS CLUB OF WILLIAMSBURG
President: W. M. Rosser, Jr., 111 Deer Spring Rd., 229-4690

MAGRUDER HOME DEMONSTRATION CLUB
President: Mrs. Shirley Basley, 122 Horseshoe Dr., 220-0164

MASONS(Chickahominy Chapter-286)
Worshipful Master: Wayne Brady, Rt. 1 Box 195-L 229-2267

MASONS(Williamsburg)
Worshipful Master: Jack Ford, P.O. Box Drawer A, 253-5277

MARCHOF DIMES-Ask Operator for Enterprise 289

MEALS ON WHEELS(Based on need, not age or income
Coordinator: Mrs. Elizabeth Hicks, Lanexa, VA 564-3605

MEDICAL SOCIETY
President: Dr. James Hess, Fidelity American Bank, Bldg. 220., 220-2924

MENTAL HEALTH-MENTAL RETARDATION SERVICES BOARD
Executive Director: Harris Daniel, 1657 Merrimac Trail, 220-1338

MIDDLE PLANTATION GARDEN CLUB
President: Mrs. Loretta Kreps, 102 Gilley Dr., 229-0456

MINISTERIAL ASSOCIATON
Contact Person: Bob Johnson, 124 Oslo Ct., 564-3934

MOOSE - LODGE No.1755 (Jamestown)
Secterary: Ray G. Cawthon, Club Address P.O. Box HO, 23187, 565-9807

MOOSE, WOMEN OF - LODGE 1755(Jamestown)
Senior Regent: Mrs. Peggy Carmine, lodge no. 565-9807

NATIONAL ASSOCIATION FOR THE ADVANCEMENT OF CLOLR PEOPLE(NAACP)
President: Phillip Cooke, 626 S. Henry St., 229-3873

ORDER OF THE EASTERN STAR
Worthy Matron: Mrs. Sherry Bushee, 217 Hogan Dr., 877-0100
Contact Person: Mrs. Kay Hobgood, 223 Hubbard Lane, 229-0222

PARENTS OF TWINS
Vice President: Mrs. Betty Saracero, 74 Bexsford Dr., 874-8198
President: Tony Thornburg, Newport News, VA., 1-723-8497

PARENTS WITHOUT PARTNERS(PWP)
President: P. J. Fresques, 704 Rolfe Rd., Apt. C, 229-5785

PATRICK HENRY HOSPITAL AUXILIARY
President: Mrs E. Vaiden, 1602 Ironbound Rd., 229-1727

PENINSULA AGENCY ON AGING
944 Denbigh Blvd., Newport News, VA 23602; 874-2495

PILOT CLUB INTERNATIONAL OF WILLIAMSBURG
President: Mrs. Theresa Runyans, 105 Rodgers Ct., 229-7597; 229-5633

QUEENS LAKE GARDEN CLUB
President: Mrs. Ann Triechler 100 six Pence Ct., 229-4603

REDCROSS, THE AMERICAN(Williamsburg Chapter)
109 Cary Street, Room 206, 253-0228

RETIRED SENIOR VOLUNTEER PROGRAM (RSVP); 220-2907

ROTARY CLUB
President: Gordon Vliet, 110 Richness Rd., 229-8694

RURITAN INTERNATIONAL
Contact: Mr. Bushop, P.O. Box N., Southern Bank; 229-7700

SALVATION ARMY
Chairman of the Service Unit: Ray Edick, P.O. Box FK, 229-7833

SENIOR CITIZENS - Program to help elderly - (CAA)
Contact: Larry Trumbo, 207 Parkway Dr., 229-9332

SENIOR CITIZENS SOCIAL CLUB
Contact: Mrs. Sally Leger, 1500 Conway Dr., 229-7540

SKIPWITH FARMS GARDEN CLUB
President: Mrs. Milton N. Stivender, 238 Christopher Wren Rd., 229-1207

SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS(SPCA)
Shelter: 430 Waller Mill Road, 229-3027
Contact: Leslie Herman, 113 King Henry Way, 220-3472

SOIL CONSERVATION SERVICE
District Conservationist: Lester Seglin, P.O. Box 280, Toano, VA. 23168
564-9243

SONS OF THE AMERICAN REVOLUTION
President: Capt. Fred Gore, 64 Winster Fax; 220-2325

SOROPTIMIST
President: Mrs. Williemae McCracken, 506 Hubbards Lane; 253-6050

STRATH JAMES PIPES & DRUMS
Pipe Major: William Pittman, P.O. Box 540, 564-8973

SWEET ADELINES
President: Mrs Pat LeVeille, 116 King William Dr., 565-2527

TIDEWATER APPALACHIAN TRAIL CLUB
President: Reese Lukei, P.O. Box 8246 Norfolk, VA 23503; 1-340-5948
1-461-8585

TOANO GARDEN CLUB
President: Mrs. Mary Haselwood, Toano, VA 23168; 564-3806

TOANO WOMAN'S CLUB
President: Mrs. Ida Feidt, 50 Riverside Dr.,(not mailing address)564-3640

TOASTMASTERS OF WILLIAMSBURG
Contact: George J. Ames, 103 Plantation Rd., 887-9476

TOASTMISTRESS CLUB OF WILLIAMSBURG
Contact: Mrs. Claudette N. Clos, 7 Shore Park Dr., Newport News, VA., 877-0870

TWENTIETH CENTURY ART GALLERY
400 West Duke of Gloucester, 229-4949

UNITED DAUGHTERS OF THE CONFEDERACY(UDC)
President: Mrs. Francis Cherry, 137 Stanley Dr., 253-0191

UNITED FUND
109 Cary Street, P.O. Box 2164, 253-2264

VETERANS OF FOREIGN WARS(VFW)
Commander: William R. Boarman, 17 Settlers Lane, 565-0032
Ladies Auxiliary President: Mrs. Peggy Boarman, 17 Settlers Ln. 565-0032

VIRGINIA LUNG ASSOCIATION
Regional Office: 11116 Jefferson Ave., Newport News, VA 595-1184; Suite 102

VPI & SU EXTENSION SERVICE(Advice & Services .
James City County Office - Emergency Operating Center, P.O. Box 69, Toano, VA
York County Office: Ballard St., Yorktown, VA; 898-0050 564-3379

WEDNESDAY MORNING MUSIC CLUB
Contact: Mrs. Rachel Hobbs, 124 Holly Rd., 229-6171

WEIGHT WATCHERS 1-800-582-8340
Monday at 6 p.m., Patrick Henry Inn, York & Page Sts.
Tuesday at 6:30 p.m., Toano Woman's Club, Toano, VA.

WELCOME WAGON
Hostess: Mrs. Barbara Shepherd, 104 Governor Berkeley Rd., 229-0148
229-7527

WELFARE, DEPARTMENT OF
James City County, Director: John Holdren, P.O. Box 528, 229-5201
Williamsburg, Director: Peter R. Nickerson, P.O. Box 371, 229-3626

WILLIAM & MARY QUARTERBACK CLUB
Contact: Mervin Frantz, 213 Buford Rd., 565-0681

WILLIAMSBURG AREA WOMEN'S CENTER
Contact: Elaine Sproat, 229-7944
Center Location: St. Stephens Lutheran Church, P.O. Box 126, 229-7944

WILLIAMSBURG BOARD OF REALTORS
Contact: Mrs. Linda Kinsman, 110 Nevada Cr., 565-2822

DOCUMENTATION ELEVEN

Instructional Management Procedures for Handicapped Students

INSTRUCTIONAL MANAGEMENT PROCEDURES FOR HANDICAPPED STUDENTS

CHARACTERISTICS	Sensory Impaired	Mentally Retarded	Multihandicapped	Orthopedically Handicapped	Other Health Impaired	Emotionally Disturbed
	Deaf, Blind, Hard-of-Hearing, Visually Impaired, Deaf-Blind	TMR, EMR, SMR				
1. Determine students' strengths, weaknesses, areas of interest and learning styles	X	X	X	X	X	X
2. Set goals and objectives for students based on their abilities, interests and learning styles	X	X	X	X	X	X
3. Break tasks down into steps that are small enough to insure success	X	X	X	X	X	X
4. Provide students with constant feedback regarding their progress	X	X	X	X	X	X
5. Constantly evaluate to determine whether students are learning	X	X	X	X	X	X
6. If students are not learning, assess present instructional management procedures and, if necessary, modify them	X	X	X	X	X	X
7. Consistantly reinforce all positive behaviors, including efforts to achieve	X	X	X	X	X	X
8. Consistently ignore failures	X	X	X	X	X	X
9. Consistently ignore or punish inappropriate behaviors	X	X	X	X	X	X
10. Establish a daily routine and stick to it	X	X	X	X	X	X
11. Make certain students know classroom rules; then consistently enforce the rules	X	X	X	X	X	X
12. Make certain students are aware of your expectations regarding their social and academic behavior	X	X	X	X	X	X

INSTRUCTIONAL MANAGEMENT PROCEDURES FOR HANDICAPPED STUDENTS

CHARACTERISTICS	Sensory Impaired	Mentally Retarded	Multihandicapped	Orthopedically Handicapped	Other Health Impaired	Emotionally Disturbed
	Deaf, Blind, Hard-of-Hearing, Visually Impaired, Deaf-Blind	TMR, EMR, SMR				
13. Provide ways for students to see progress (charts, etc.) and allow them to demonstrate skills	X	X	X	X	X	X
14. Give directions clearly and concisely; make sure students can repeat the directions	X	X	X	X	X	X
15. To the largest extent possible, use student's interests as content to teach skills	X	X	X	X	X	X
16. Tell the students that they can do an activity they like if they successfully complete a task they dislike	X	X	X	X	X	X
17. Provide for overlearning, use educational games for needed drill		X	X			
18. Use concrete experiences to teach; show rather than tell		X	X	X	X	X
Use a multisensory approach to teaching	X	X	X	X	X	X
20. Provide verbal and non-verbal cues to remind the students what to do	X	X	X	X	X	X
21. Promote peer acceptance of all students	X	X	X	X	X	X
22. Repeat information which a student has missed	X	X	X	X	X	X
23. Work with student's families to plan and implement a coordinated approach to helping the students learn	X	X	X	X	X	X
24. Deal with problems as they arise	X	X	X	X	X	X
25. Anticipate and plan for potential problems	X	X	X	X	X	

INSTRUCTIONAL MANAGEMENT PROCEDURES FOR HANDICAPPED STUDENTS

CHARACTERISTICS	Sensory Impaired	Mentally Retarded	Multihandicapped	Orthopedically Handicapped	Other Health Impaired	Emotionally Disturbed
	Deaf, Blind, Hard-of-Hearing, Visually Impaired, Deaf-Blind	TMR, EMR, SMR				
26. Encourage students to compete with themselves rather than with others	X	X	X	X	X	X
27. Move around the room freely	X	X	X	X	X	X
28. Remove potentially troublesome objects from the room	X	X	X	X	X	X
29. Allow students to save face	X	X	X	X	X	X
30. Provide for students who need time alone	X	X	X	X	X	X
31. Adjust assignments to accomodate students' attention spans	X	X	X	X	X	X
32. Model the appropriate academic and social behaviors; also, point out and reinforce students who model appropriate behaviors	X	X	X	X	X	X
33. Help students find words to correctly label feelings	X	X	X	X	X	X
34. Help students identify consequences to behaviors	X	X	X	X	X	X
35. Role play alternative behaviors with students	X	X	X	X	X	- X
36. Structure the environment to promote students' independence	X	X	X	X	X	X
37. Provide alternative ways for students to receive and express information	X	X	X	X	X	X
38. Encourage students to use learning aids if they need them (tape recorders, talking calculators, Language Masters, etc.)	X	X	X	X	X	X
39. Teach major body concepts	X	X	X	X	X	X

CHARACTERISTICS	Sensory Impaired Deaf, Blind, Hard-of-Hearing, Visually Impaired, Deaf-Blind	Mentally Retarded TMR, EMR, SMR	Multihandicapped	Orthopedically Handicapped	Other Health Impaired	Emotionally Disturbed
40. Arrange for peers to help students who cannot lift heavy books, open doors, sharpen pencils, etc.			X	X	X	
41. Use available resource people to help plan and implement educational programs for handicapped students	X	X	X	X	X	X
42. Use available material resources	X	X	X	X	X	X
43. Obtain medical information and recommendations regarding medicine, activity level and physical condition	X		X	X	X	X
44. Monitor students levels of physical activity			X	X		
45. Check prosthetics daily for possible defects	X		X	X	X	
46. Seat students in center of second row from the front	X					
Speak to students on eye-level whenever possible	X					
48. Rephrase rather than repeat information	X					
49. Check frequently to make certain students understand what you have communicated to them	X	X	X	X	X	X
50. Keep down the general level of classroom noise	X	X	X	X	X	X
51. Stand facing the light source	X					
52. Help students discover the most appropriate lighting condition for them to learn	X					
53. Seat students back and center	X					
54. Use overhead projector rather than chalkboard	X					

CHARACTERISTICS	Sensory Impaired	Mentally Retarded	Multihandicapped	Orthopedically Handicapped	Other Health Impaired	Emotionally Disturbed	Speech Impaired	Specific Learning Disabilities
	Deaf, Blind, Hard-of-Hearing, Visually Impaired, Deaf-Blind	TMR, EMR, SMR						
55. Adapt materials for impairment of fine/gross motor abilities (large 3-sided pencils, typewriter, paper with wider lines and spaces)		X	X	X	X			X
56. Teach body movement (parts in relation to each other and body in relation to space in which it moves)	X	X	X	X				X
57. Use peer guides to help students find way in new places	X							

DOCUMENTATION TWELVE

Association of Radio Reading Services Directory

Association of
Radio
Reading
Services, Inc.

for blind and handicapped persons

DIRECTORY

ON THE AIR AND PLANNING SITES

April, 1982

(See Notice on last page)

SCA ON THE AIR SERVICES

ALABAMA	Sheila Miller, Director WBHM Radio Reading Services 1028 - 7th Ave. So. Birmingham, AL 35294	205-934-2606
	Cheryl Hein WLRH Radio Reading Service 222 Holmes Ave. E. Huntsville, AL 35801	205-539-9405
ARKANSAS	Randy Johnson, Exec. Dir. Arkansas Radio Reading Service 2600 W. Markham, P.O. Box 668 Little Rock, AR 72203	501-663-4540
ARIZONA	Jean Joines, Sun Sounds Service for the Blind 3124 E. Roosevelt Phoenix, AZ 85008	602-231-0500
CALIFORNIA	Dr. George Benson Radio Reading Service, Com. Dept. Chico State University Chico, CA 95929	916-895-5806
	Dr. Frank George, Gen. Manager KLON 201 E. 8th St. Long Beach, CA 90813	213-436-9931
	Sharon Stevens, Coordinator Los Angeles Radio Infor. Service 1570 E. Colorado Blvd. Pasadena, CA 91106	213-578-7231
	Jim Bousfield, Director FM 89, Radio Info. Service 5300 Campanile Dr. San Diego, CA 92182	714-265-6645
	Lazar Keitelman, Acting Dir. Broadcast Services f/t Blind 420 Taylor St., Room 330 San Francisco, CA 94102-1777	415-885-4522

SCA ON THE AIR SERVICES (Cont'd.)

CANADA
Gordon Norman, Exec. Dir.
Radio Reading Service
1274 Rebecca St.
Oakville, Ontario
Canada L6L 1Z2
416-827-4455

COLORADO
Barbara Quinn, CRIS Manager
Colorado Radio Info. Service, Inc.
P.O. Box 1652
Greeley, CO 80632
303-351-2165

CONNECTICUT
Ron Milligan, Gen. Manager
Connecticut Radio Info. Service
170 Ridge Rd.
Wethersfield, CT 06109
203-522-8710

FLORIDA
Margaret Collins, RRS Coord.
WLRN Radio Reading Service
1410 NE 2nd Ave., Rm. 102
Miami, FL 33132
305-350-3920

Elizabeth Willson-Young, WUSF-RIS
University of South Florida
AOC 103
Tampa, FL 33620
813-974-4193

GEORGIA
Jim Cashin, Exec. Dir.
Georgia Radio Reading Service
1580 Peachtree St.
Atlanta, GA 30309
404-873-3930

IDAHO
Ed Ritter, Audio Chief
Radio Reading Service
Idaho State Library
325 W. State St.
Boise, ID 83702
208-334-2117

ILLINOIS
Rev. B.L Wittenbrink, Dev. Dir.
Radio Info. Serv. for Blind and Hand.
9500 Illinois, RT 15 W
Belleville, ILL 62223
618-397-6700

Paul Farris
Illinois Radio Reading Serv.
59 E. Armory
Champaign, IL 61820
217-333-6503

SCA ON THE AIR SERVICES (cont'd.)

ILLINOIS (cont'd.)	Kathryn Bikos Chicagoland Radio Info. Service 425 N. Michigan Ave., Suite 1146 Chicago, IL 60611	312-670-4318
	Chris Bruce, Director WNUI-FM, North ILL Radio Info. Serv. Northern Illinois University DeKalb, IL 60115	815-753-0212
	John Wild, Prog. Dir. West Central Ill. Radio Info. Serv. Memorial Hall, W.I.U. Macomb, IL 61455	309-298-2403
	Glenda Raber Radio Information Service 2200 College Dr. Mt. Carmel, IL 62863	618-262-8641 x 253
	Frank Thomas WCBU-FM Radio Reader 106 N.E. Monroe Peoria, IL 61625	309-673-7100 or 3132
	Jeanne Enlow, Coord. WSSR-FM Print Handicapped Service Sangemon State University Springfield, IL 62708	217-786-6516
INDIANA	Peg Lehrman, Coord. NE Indiana Radio Reading Serv. 920 Florence Ave. Fort Wayne, IN 46808	219-422-8230
	John Grist Trade Winds Radio Reading Service 1800 E. 35th Ave. Gary, IN 46409	219-882-5678
KANSAS	Vance Tyrell, Director Radio Reading Service or KHCC 1300 N. Plum Hutchinson, KS 67501	316-662-6646

KANSAS (cont'd.)

Rosie Hurwitz, Director
Audio Reader Program
Univ. of Kansas, P.O. Box 1130
1150 W. 11th St.
Lawrence, KS 66044
913-864-4600

Petty Wente, KMUW-FM Radio
Wichita Audio Reader
1751 N. Fairmount
Wichita, KS 67208
316-682-9121

KENTUCKY

Jesse Simpson, Jr., Dir.
Kentuckiana Radio Info. Service
429 Fincastle Bldg., 305 W. Broadway
Louisville, KY 40202
502-589-5195

MARYLAND

Linda Sherman, Coord.
Baltimore Radio Reading Service
2901 Liberty Heights Ave.
Baltimore, MD 21215
301-396-0990

Dr. Margaret Rockwell, Director
The Washington Ear
35 University Blvd.
Silver Spring, MD 20901
310-681-6636

MASSACHUSSETTS

Ron Bersani, Exec. Dir.
Talking Information Center
Box 487
Marshfield, MA 02050
617-834-4400

MICHIGAN

Sandy Rubenstein
Detroit Radio Info. Service
655 Merrick
Detroit, MI 48202
313-577-4204

Rob Downey, Manager
WKAR Radio Talking Book
Michigan St. University
310 Auditorium Bldg.
E. Lansing, MI 48824
517-353-9124

MINNESOTA

Joanne Jonson, Director
Radio Talking Book Network
Communication Center
1745 University Ave.
St. Paul, MN 55104
612-296-6723

SCA ON THE AIR SERVICES (cont'd.)

MISSOURI	KCSR-FM, Ann Cartwright Univ. of Missouri 5100 Rockhill Rd. Kansas City, MO 64110	816-276-1549
MONTANA	Tamara Brothers, Director KUFM-Western Montana Radio Reading Serv. 924 S. 3rd West Missoula, MT 59801	406-243-6099
NEBRASKA	Richard Parker, Director Radio Talking Book Service 3219 Cuming St. Omaha, NB 68131	402-556-2770
NEW YORK	Christine S. Prinzi, Handic. Serv. Lib. Update Radio Reading Service 106 W. Fifth St. Jamestown, NY 14701	716-484-7135
	Kay Naumann, Coord. Read-Out, WCNY-FM 506 Old Liverpool Ave. Liverpool, NY 13088	315-457-0440 x 55
	Radio Vision Art Livesey 619 North St. Middletown, NY 10940	914-343-4202
	Jasha Levi, Exec. Dir. In-Touch Networks, Inc. 322 W. 48th St. New York, NY 10036	212-586-5588
	Marianne Cunningham, Prog. Mgr. R.I.S.E. Box 17 Schenectady, NY 12301	518-356-1700
NORTH CAROLINA	James H. Bailey, Prog. Dir. Central Piedmont Comm. College RRS Box 35009 Charlotte, NC 28235	704-373-6789

OHIO	Marcia Jonke Tri-County Radio Reading Serv. 318 Water St. Akron, OH 44308	216-376-8999
	Dr. Elmer Fischer, Director RRS of Greater Cincinnati 307 E. 4th St. Cincinnati, OH 45202	513-621-4545
	Tom Mendelsohn, Coord. Cleveland Radio Reading Service 1901 E. 101 St. Cleveland, OH 44106	216-791-8118
	Arthur L. Schultz, Exec. Dir. Central Ohio Radio Reading Service 229 S. High St. Columbus, OH 43215	614-464-2614
	James Donnan, Prog. Dir. Youngstown Radio Reading Service 2246 Glenwood Ave. Youngstown, OH 44511	216-788-2444
OKLAHOMA	Travis Harris, Director Oklahoma Radio Reading Service P.O. Box 25352 Oklahoma City, OK 73125	405-521-3833 3832
OREGON	Graham Archer, Exec. Dir. Golden Hours, Inc. 2828 SW Front St. Portland, OR 97201	503-229-4804
	Dr. Patricia Swenson The Seeing Sound 546 NE 12th Ave. Portland, OR 97232	503-234-5469
PENNSYLVANIA	Tony Swartz, President RADPRIN-Greater Lehigh Valley 131 E. Broad St. Bethlehem, PA 18018	215-866-8049

SCA ON THE AIR SERVICES (cont'd.)

PENNSYLVANIA (cont)	Julia Bandecca, Director Radio Talking Library 2402 Cherry St. Erie, PA 16502	814-455-0995
	Jay Doudna Radio Talking Library Sight Saving Center 244 N. Queen St. Lancaster, PA 17603	717-394-7644
	James Swed Radio Information Center f/t Blind 919 Walnut St., 2nd Floor Philadelphia, PA 19107	215-922-5450
	Norman H. Russell, Gen. Mgr. Radio Information Service Golden Triangle Radio Info. Center 408 University Hall Duquesne University Pittsburg, PA 15282	412-434-6023
	Alfred Davis III, Director Radio Reading Service Lachawanna Assoc. f/t Blind 228 Adams Ave. Scranton, PA 17503	717-342-7613
	George Harris, Exec. Dir. Radio Reading Service 800 E. King St. York, PA 17403	717-848-1690
RHODE ISLAND	Judy Smith, Exec. Dir. Rhode Island Radio Info. Service P.O. Box 6245 Providence, RI 02904	401-331-0222
SOUTH CAROLINA	Bob Somogyi S.C. Educational Radio f/t Blind 1430 Confederate Ave. Columbia, SC 29201	803-758-7771

SCA ON THE AIR SERVICES (cont'd.)

SOUTH DAKOTA
David Vogel
Division of Serv. to Visually Impaired
Dept. of Vocational Rehab.
Illinois St.
Pierre, SD 57501 605-773-3195

TENNESSEE
Steve Terry, Stat. Mgr.
W. Tenn. Talking Library
1850 Peabody Ave.
Memphis, TN 38104 901-528-2929

Alvin Bolt, Gen. Mgr.
WPLN Talking Library
222 - 8th Ave. No.
Nashville, TN 37203 615-244-4700

TEXAS
Connie Henley, Stat. Mgr.
North Texas Radio Reading Service
3001 Bookout
Dallas, TX 75201 214-742-9705

Marjorie Miles, Coord.
El Paso Radio Reading Service
100 Dunne
El Paso, TX 79905 915-532-4495

Phyllis Webster, Exec. Dir.
Houston Taping f/t Blind
3935 Essex Ln.
Houston, TX 77027 713-871-1644

UTAH
Rex Wallgren
Radio Reading Service
Utah State Library
2150 S. 300 W.
Salt Lake City, UT 84115 801-533-5855

VIRGINIA
Donald Lanham, Gen. Mgr.
WMRA-FM Reading Service f/t Blind
James Madison Univ.
Harrisonburg, VA 22807 703-433-6221

Nick Morgan, Director
Virginia Voice
P.O. Box 9259
Richmond, VA 23227 804-266-2477

SCA ON THE AIR SERVICES (cont'd.)

VIRGINIA (cont'd.)	Dennis Sullivan Radio Reading Service Box 4195 Roanoke, VA 24015	703-982-7284
	John Curtis, Founder/Chief Center for Excellence P.O. Box 158 Williamsburg, VA 23185	804-229-8541
WASHINGTON	Jan Ames, Director Radio Reading Service 811 Harrison St. Seattle, WA 98129	206-464-6626
WEST VIRGINIA	Duane Brown West Virginia Library Commission Radio Reading Service - B/PH Science and Cultural Center Charleston, WV 25305	304-348-4061
WISCONSIN	Jayne Herring, E.A.R.S Specialist E.A.R.S. Gateway Technical Institute 3520 - 30th Ave. Kenosha, WI 53141	414-552-9483
	H. Alton Davis WI Radio Reading Service, Inc. 905 University Ave., Suite 307 Madison, WI 53715	608-255-7730

MAIN CHANNEL SERVICES ON THE AIR

COLORADO	Kurt Grow, Prog. Dir. KEPC-FM Radio 220 Bott St. Colorado Springs, CO 80904	303-471-7546
	Edward Elliot, Gen. Mgr. KWSB-FM P.O. Box 928 Gunnison, CO 81230	303-943-3033
FLORIDA	Ginger Grey WHRS-FM Radio P.O. Box 870 W. Palm Beach, FL 33402	305-732-7850
GEORGIA	Van Joyner WABE-FM Radio 740 Bismark Rd. NE Atlanta, GA 30324	404-873-4477
	Stephen Douglass, President GA Fed. f/t Blind 2719 Henry St. Augusta, GA 30324	404-738-8597
INDIANA	B. Knauer WEDM-FM Radio, "Ears For Eyes" 9500 E. 16th St. Indianapolis, IN 46229	317-898-6133 x 52
IOWA	Radio Reading f/t Blind Iowa Commission f/t Blind 4th & Keosauqua Way Des Moines, IA 50309	515-283-2601
LOUISIANA	Dr. R.T. McLean Radio f/t Blind & Print Hand., Inc. 5926 S. Front New Orleans, LA 70115	504-899-1144
MASSACHUSSETTS	John Levin, WCUW-FM 950 Main St. Worcester, MA 01610	617-793-7585

MAIN CHANNEL SERVICES ON THE AIR (cont'd.)

MICHIGAN	Books By Radio WUOM-FM Radio 5501 LSA Bldg. Ann Arbor, MI 48109	313-764-9210
	Stephen Dupras, Mgr. WNMU-FM, Radio Reader Northern Michigan Univ. Marquette, MI 49855	906-227-1300
	WOPR-FM Radio 13701 Oak Park Blvd. Oak Park, MI 48237	313-548-9677
NEW JERSEY	WBGO-FM E.I.E.S. of New Jersey Box 1111 Bloomfield, NJ 07003	201-624-2405
PENNSYLVANIA	Dave Wuchina WIUP-FM Radio Davis Hall Indiana Univ. of Penn. Indiana, PA 15701	412-357-2490
	Thomas Carten Radio Home Visitor 1602 King's College Wilkes Barre, PA 18711	717-826-5900
TEXAS	Andrea Baldwin KACV-FM, Amarillo College P.O. Box 447 Amarillo, TX 79107	806-376-7032
	Priscilla Drucker, Soundsight Communications Bldg. B Univ. of Texas Austin, TX 78712	512-471-1631
	Alan B. Albarran The Paper Talks KSHU-FM, Sam Houston St. Univ. Huntsville, TX 77341	713-294-1344

MAIN CHANNEL SERVICES ON THE AIR (cont'd.)

VIRGINIA	William Schwartz WYCS-FM Radio Yorktown High School Yorktown, VA 23690	804-898-0357
WEST VIRGINIA	Tom Zalaski WMUL-FM Radio f/t Blind Marshall Univ. Huntington, WV 25701	304-696-6640

PLANNING SITES

ALABAMA

Dwight Cleveland
WTSU Radio
Troy State Univ.
Troy, AL 36081
205-566-5814

ALASKA

Bill Brooks
Aurora Community Broadcast.
Alaska Pacific University
Grant Hall
Providence Drive
Anchorage, AK 99504

CALIFORNIA

Shaye Padgham, Pres.
P.O. Box 222863
Carmel, CA 93922
408-624-1105

Jerry Delaunay, Pres. & Gen. Mgr.
California Eye
DSA Community Network
P.O. Box 4221
Pasadena, CA 91106
213-793-0813

Phil Corriveau, Stat. Mgr.
KXPR
6000 "J" St.
Sacramento, CA 95819
916-322-3727

CANADA

Donna May Likens
1401-10145 - 121 St.
Edmonton, Alberta
Canada T5N 1K5

FLORIDA

Raymond Meyers
Bascomb Mem. Broadcasting Found.
P.O. Box WDNA, Ludlum Branch
Miami, FL 33155
305-264-9362

GEORGIA

David Levin
Peter Nunnen
WSVH-FM
499 E. Liberty St.
Savannah, GA 31401
912-238-0911

IDAHO

Doug Felton
Center for Independent Living
P.O. Box 4185
Pocatello, ID 83201

PLANNING SITES (cont'd.)

ILLINOIS

Southern Ill. Media Services
c/o Valerie Brew Parrish
Placement Center
Southern Ill. Univ., Woody Hall
Carbandale, IL 62901 618-453-2391

Lewis Schwartz
3820 - 25th St., Apt. 4
Moline, IL 61265 309-797-5851

Margaret Sutherland
Vol. Coord.
Illinois Valley Library System
845 Brenkman Dr.
Pekin, IL 61554

INDIANA

Dan Heely, Prog. Dir.
WNIN-FM
9201 Petersburg Rd.
Evansville, IN 47711 812-867-6471

Karen Goetfrish
Indiana Univ., South Bend
1700 Mishawaka Ave.
South Bend, IN 46615

James Baumgartner
605 S. 29th St.
South Bend, IN 46615 219-237-4479

KENTUCKY

WKYU-FM
Western Kentucky Univ.
Bowling Green, KY 42101 502-745-5489

MASSACHUSSETTS

Francis Dillon, Stat. Mgr.
Springfield Tech. Comm. College
1 Armory Square
Springfield, MA 01101 413-781-7822 x 383

MICHIGAN

William J. Leeder, Jr.
Assoc. f/t Blind and for Sight Conserv.
215 Sheldon SE
Grand Rapids, MI 40503 616-458-1187

PLANNING SITES (cont'd.)

MISSISSIPPI
Lee Morris
Miss. Authority for Ed. Telev.
P.O. Drawer 1101
Jackson, MS 39205 601-982-6378

NEVADA
Nevada Radio Information Service
Steve Morris, AAL, Resident Agent
1700 Valley Bank Plaza
300 So. 4th St.
Las Vegas, NV 89101 702-385-2188

NEW HAMPSHIRE
Gale N. Stickler, Exec. Dir.
NH Assoc. f/t Blind
600 Spool St.
Concord, NH 03301 603-224-4039

NEW JERSEY
Bernard Pryor, Pres.
New Jersey Radio Reading Serv. f/t Blind
Box 56
Heights Town, NJ 08520 201-239-2926

Rick Hanson
Brookdale Community College
Newman Spring Road
Lyncroft, NJ 07738 201-842-1900

Dave Andrews
Library f/t Blind & Hand.
1676 N. Olden Ave. Ext.
Trenton, NJ 08638 609-292-6450

NEW MEXICO
Lois MacLean
New Mexico Library f/t Blind
P.O. Box 1629
Sante Fe, NM 87503 505-827-2033

NEW YORK
Frank Endress
Blind Assoc. of Western NY
1170 Main St.
Buffalo, NY 14209

David Clousky
Southern Tier f/t Blind
719 Lake St.
Elmira, NY 14901 607-734-1554

PLANNING SITES (cont'd.)

NEW YORK (cont'd.)

Marge Fiorino
Mid-Hudson Council of the Blind
115 S. Hamilton St.
Poughkeepsie, NY 12601

Stan Grenn, Exec. Dir.
Assoc. f/t Blind
422 S. Clinton
Rochester, NY 45701 716-232-1111

NORTH CAROLINA

Joseph Ross
Fayetteville State Univ.
1200 Murchinson Rd.
Fayetteville, NC 28302 919-486-1111

Ben Eason, Director
Raleigh Radio Reading Service
118 Woodburn Rd.
Raleigh, NC 27605

OHIO

Rick Madden
WOUB-FM
Univ. of Ohio
29 S. College
Athens, OH 45701 614-594-6107

Ray Creech
Catholic Social Serv.
641 E. High St.
Springfield, OH 45505 513-325-8715

Barry A. McEwen
The Sight Center
1819 Canton St.
Toledo, OH 43624 419-241-1783

PENNSYLVANIA

Marjorie Dunmire
Keystone Country Radio Info. Center
1105 - 13th St.
Altoona, PA 16601 814-944-0079

Charles Burr
Capitol Area Radio Reading Serv.
446 Herr St.
Harrisburg, PA 17102 717-236-2565

PLANNING SITES (cont'd.)

PENNSYLVANIA (con.)	Jonathan Fister Mercer Co. Radio Reading Serv. P.O. Box 1181 Sharon, PA 16146	412-347-5501
TENNESSEE	Jean Jolly Office of the Handicapped City County Bldg., Suite 435-436 400 Main St. Knoxville, TN 37902	615-521-2054
TEXAS	Ronald Gutowsky Eden Home for the Aged, Inc. 631 Lakeview Blvd. New Braunfels, TX 78130	512-625-6291
	Grady Price, Director San Antonio Insight, Inc. Tower Life Bldg. 310 S. St. Mary's, Rm. 2408 San Antonio, TX 78205	512-228-0865
VERMONT	Bill Sullivan Vermont Radio Info. Serv. Enter. P.O. Box 207 Burlington, VT 05401	802-863-1358
	David Mentasti Div. f/t Blind & Vis. Hand. 103 S. Main Waterbury, VT 05676	802-241-2211
VIRGINIA	Jerry Wareham WHRO 5200 Hampton Blvd. Norfolk, VA 23508	804-489-9476
WASHINGTON	Sue Wallace Kennedy Library E. Washington Univ. Cheney, WA 99004	509-359-2266
	Robert Maine Div. of Radio & Tel. Serv. of KWSU Washington St. Univ. Murray Communications Bldg. Pullman, WA 99164	509-335-7301

NOTICE: Send or call, within 30 days of the publication of this directory, any corrections and/or additions of any nature to:

Jane Erickson
Communication Center
Minnesota State Serv. f/t Blind
1745 University Ave.
St. Paul, MN 55104

612-296-6723